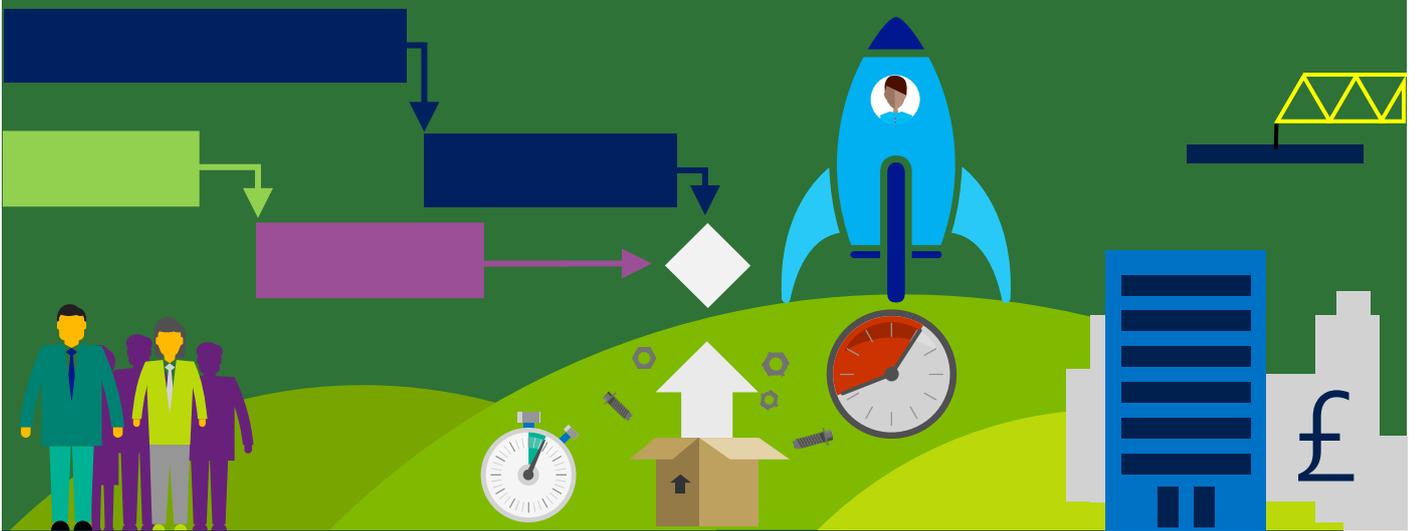




# Microsoft Office Training Series

# Project Introduction



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# Welcome to your Project Introduction Training course

- Setup, layout and design Projects plans
- Create Tasks and understand the relationships between them
- Generate and format a Gant Chart for your Project plan
- Work with Base Calendars and to work with exceptions
- Show Plans in different views and to export summaries such as a Timeline or Work Break Down Structure

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Professional Development Series

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# Introduction to Microsoft Project

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## Basic Project Management Concepts

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### What is Project Management?

The application of knowledge, skills, tools and techniques to a broad range of activities in order to meet the requirements of a particular project.

### The Microsoft Project Map

The Microsoft Project Map outlines the three phases of the project life cycle:

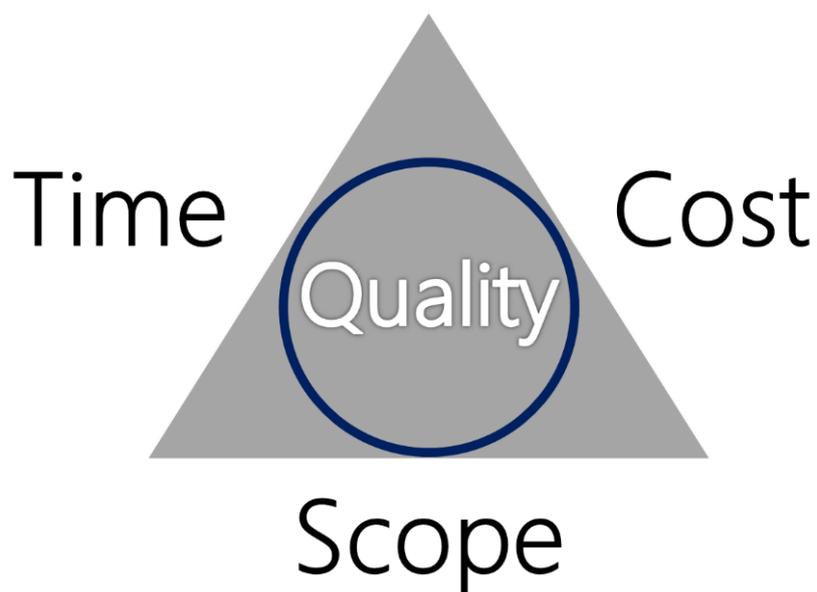
1. Build a plan
2. Track and manage a project
3. Close a project

### Project Triangle

All projects involve time, money, and scope. Change one and the others are impacted.

At the centre of the triangle is Quality - affected by any change in the other three.

TIME + MONEY + SCOPE = QUALITY



**PRINCE2** stand for (**PR**ojects **IN** **C**ontrolled **E**nvironments) and is a process-based method for effective project management.

**PRINCE2** projects have the following characteristics -

- A finite and defined life cycle
- Defined and measurable business products
- A corresponding set of activities to achieve the business products
- A defined amount of resources
- An organisation structure, with defined responsibilities, to manage the project

**PRINCE2** offers best practice guidance on project management and has the following features:

Its focus on business justification

A defined organisation structure for the project management team

Its product-based planning approach

Its emphasis on dividing the project into manageable and controllable stages

Its flexibility to be applied at a level appropriate to the project.

<https://www.prince2.com/uk>

First released as Microsoft Project V1 in early 1990 the software has grown into a rich application designed to help Project Managers:

### Organise

List and group the tasks that together will lead to the desired Project outcome

Identify and assign the resources required to their respective tasks

### Schedule

Use dependencies between tasks plus constraints to position tasks on the Gantt chart

### Manage

Forecast costs and spending (Cash flow)

Allow the plan to be modified to account for actual progress

Monitor and report on progress including spend and workload

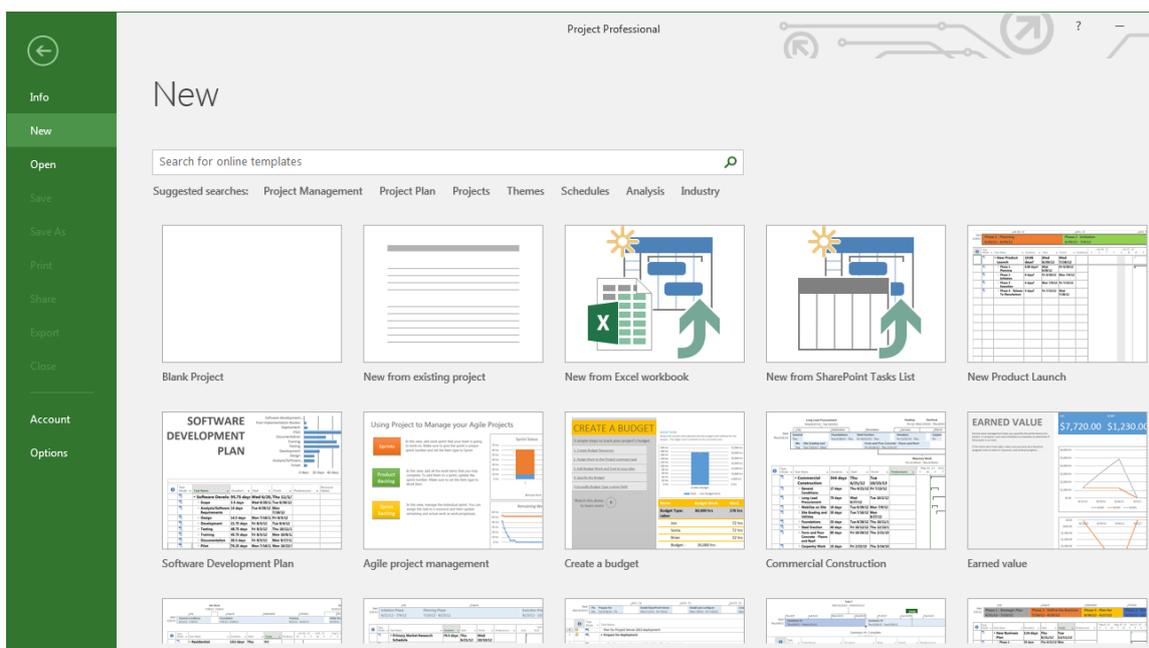
# Project Environment Overview

The Microsoft Project 2016 family of products consists of Microsoft Project Standard 2016, Microsoft Project Professional 2016, Microsoft Project Server 2016 and Project Online

*The content of this course refers to features available in the two desktop versions (Standard and Professional). Most of the end user features are available in both versions, the main difference being that the Professional version is required if you want to connect to Project Server or sync tasks with SharePoint.*

## Templates

- File → New → Select a template or from one of the suggested searches or select New from an existing project.



Microsoft Project 2016 has numerous features not available in versions prior to Project 2010 which are explored during this course:

Customisable fluent user interface (the new ribbon) and Quick Access Toolbar

Backstage view

Timeline view

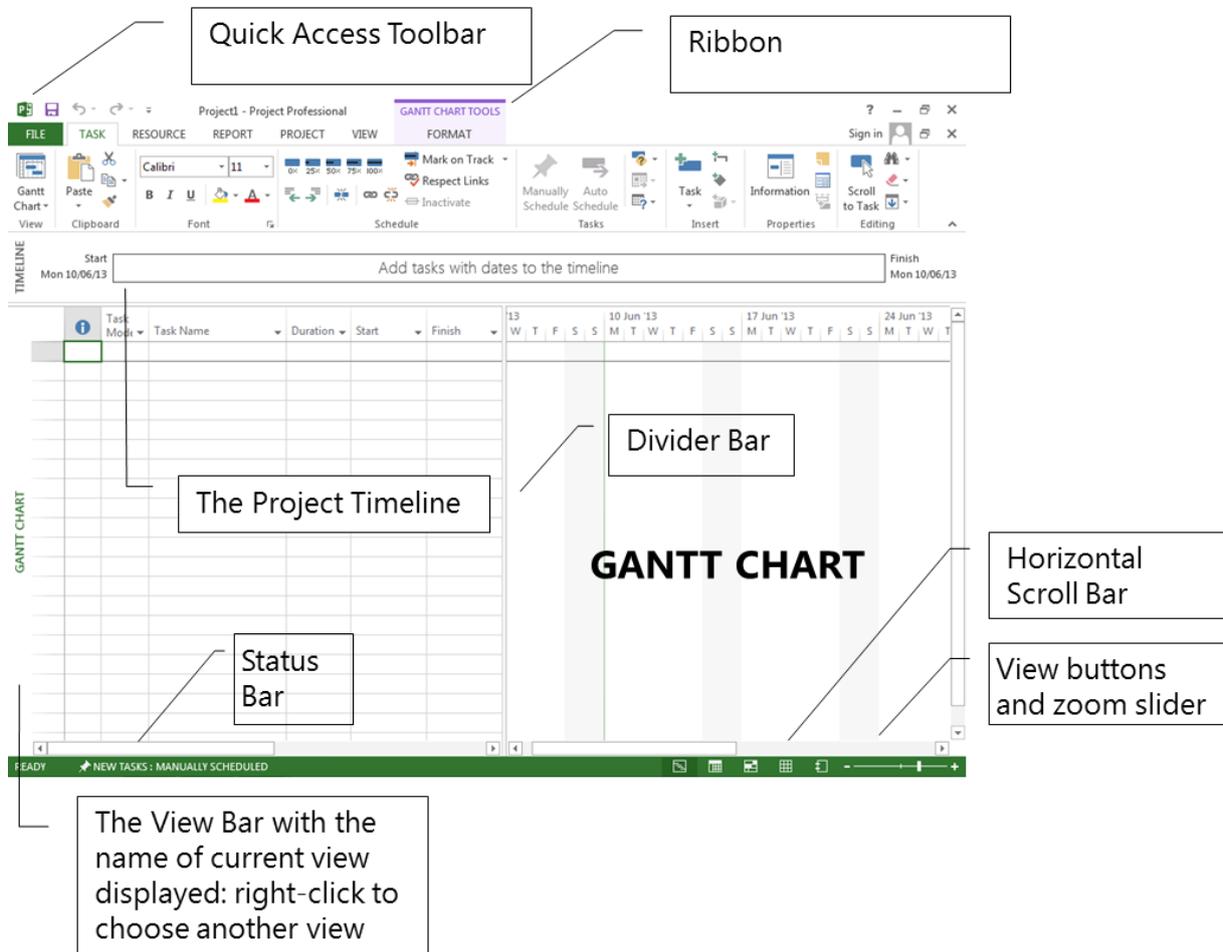
Team Planner (Professional version only)

Manual v Auto scheduling

- Task Inspector
- Active/inactive tasks
- Top down summary tasks

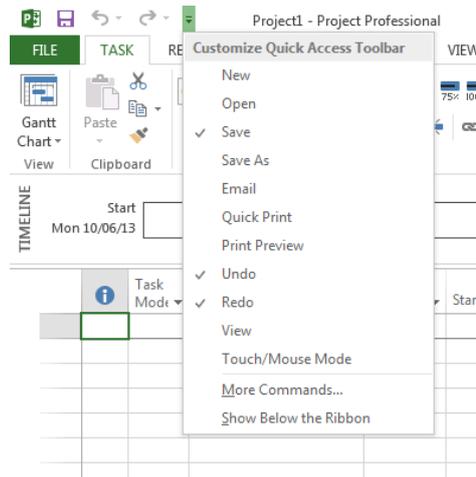
## Navigation

The default Project view is the *Gantt Chart* view which consists of a table of data on the left hand side of the screen and a Gantt bar chart on the right. The Divider Bar separates the two and can be repositioned to display more of the table or more of the chart. The Gantt table consists of rows and columns. Just like on a spreadsheet, the intersection of a row and a column is called a *cell*. The Gantt bar chart graphically displays your schedule.



## The Quick Access Toolbar:

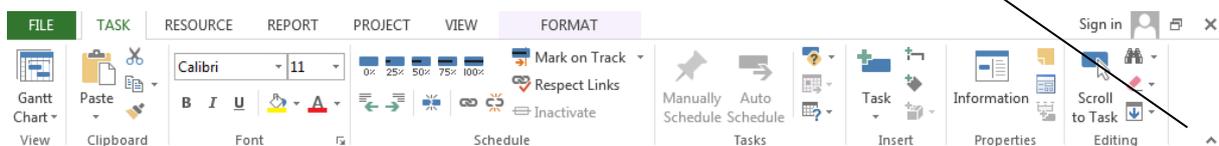
The Quick Access Toolbar (QAT) is a customizable toolbar that can display either above or below the Ribbon. Click the **Customize Quick Access Toolbar**  (on the right of the QAT) to change how it is displayed:



**Tip:** to add commands (buttons) to the Quick Access Toolbar, right click any existing command and from the shortcut menu choose Add to Quick Access Toolbar:

## The Ribbon (with the Project tab displayed):

Click here to collapse the Ribbon



The Ribbon, which is part of the Microsoft Office Fluent user interface, is designed to help you quickly find the commands that you need. Commands are organized in logical groups that are collected together under tabs.

**Note:** The Format tab is context specific – the commands on it changes depending on the view/area of the screen that is selected.

When the Ribbon is collapsed, you see only the tabs. To use the Ribbon while it is collapsed, click the tab you want to use, and then click the option or command you want to use.

**Tip:** To quickly collapse the Ribbon, double-click the name of the active tab. Double-click a tab again to restore the Ribbon. The **Keyboard shortcut** to collapse or view the Ribbon is CTRL+F1. You can also select Pin the Ribbon on the bottom right of the Ribbon.

### The Status Bar:

---

The status bar displays information such as whether filters are applied or whether new tasks are 'Manually' or 'Auto Scheduled':

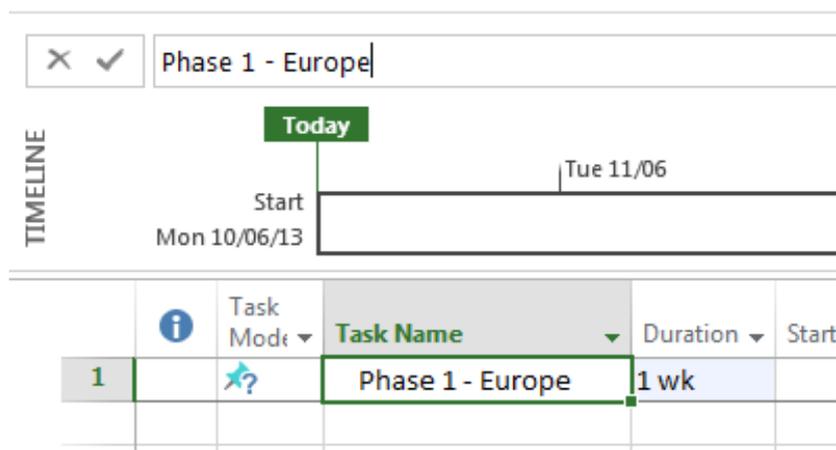


On the right of the status bar is the Zoom Slider and quick buttons for displaying the main views of Project (Gantt Chart, Task Usage, Team Planner and Resource Sheet):

### The Entry Bar:

---

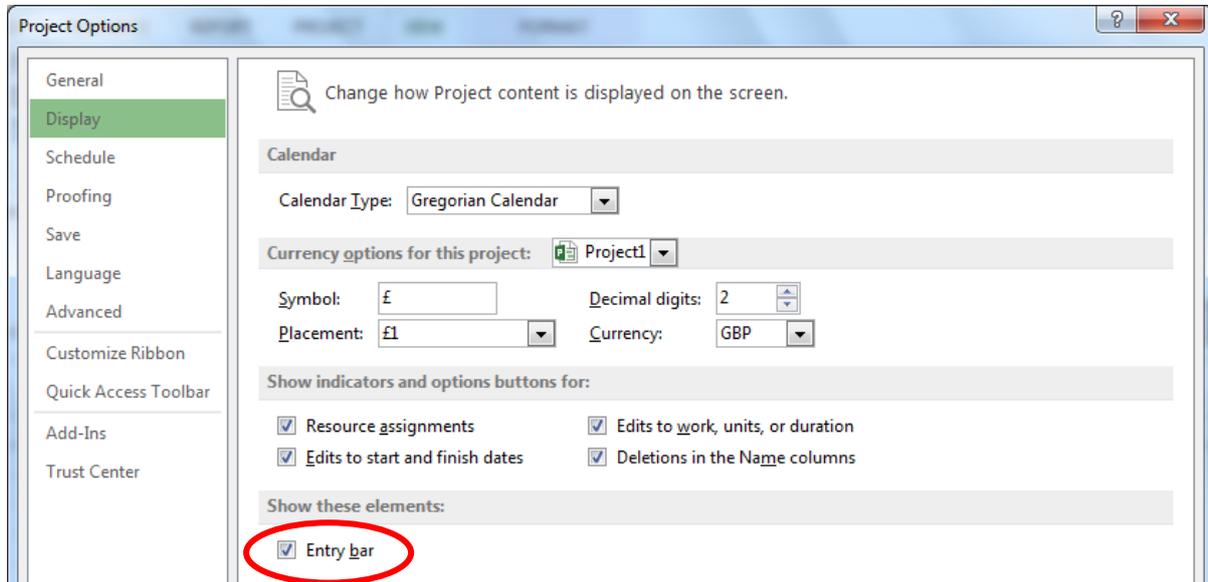
The Entry Bar allows you to edit the content of a cell:



**Note:** Unlike previous versions of Project, the Entry Bar is not displayed by default. To display the Entry Bar:

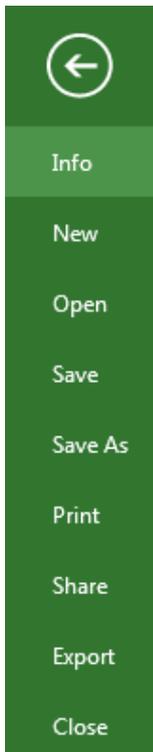
1. Click the File Tab
2. Click Options
3. Click Display

Click the option to show the element Entry Bar



## Using the Ribbon

### The File Tab



After you click the **File** tab, you can see the new **Microsoft Office Backstage view** which is common across all the MS Office 2016 suite of applications. The Backstage view is where you manage your files and data — creating saving, inspecting for hidden metadata or personal information, and setting options.

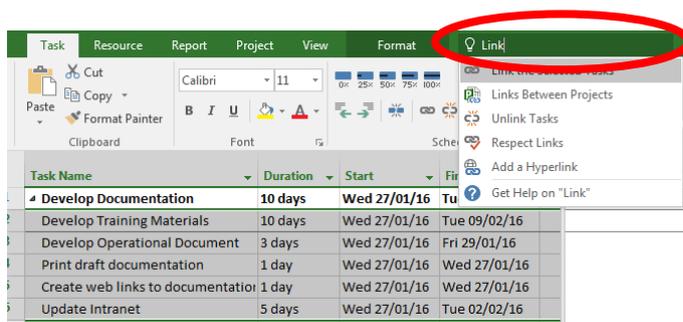
The Task Tab	The <b>Task tab</b> is similar to the Standard and Formatting toolbars available in previous versions and has commands to link, outline and track tasks.
The Resource Tab	The <b>Resource tab</b> pulls together the various tools for allocating, sharing and levelling resources.
The Project Tab	The <b>Project tab</b> is a combination of both the Project and Tools menus available in previous versions and includes commands to change the Project calendar and baseline the project.
The View Tab	The <b>View tab</b> has features from View, Project and Windows menus available in previous versions and includes commands to Group, sort, filter, highlight tasks, zoom controls and split views.
The Format Tab	The <b>Format tab</b> includes options to customise the look of the Gantt chart (like the Gantt Chart wizard in the previous versions) and show/hide summary tasks & project summary task

## Getting Help

### Tell Me box

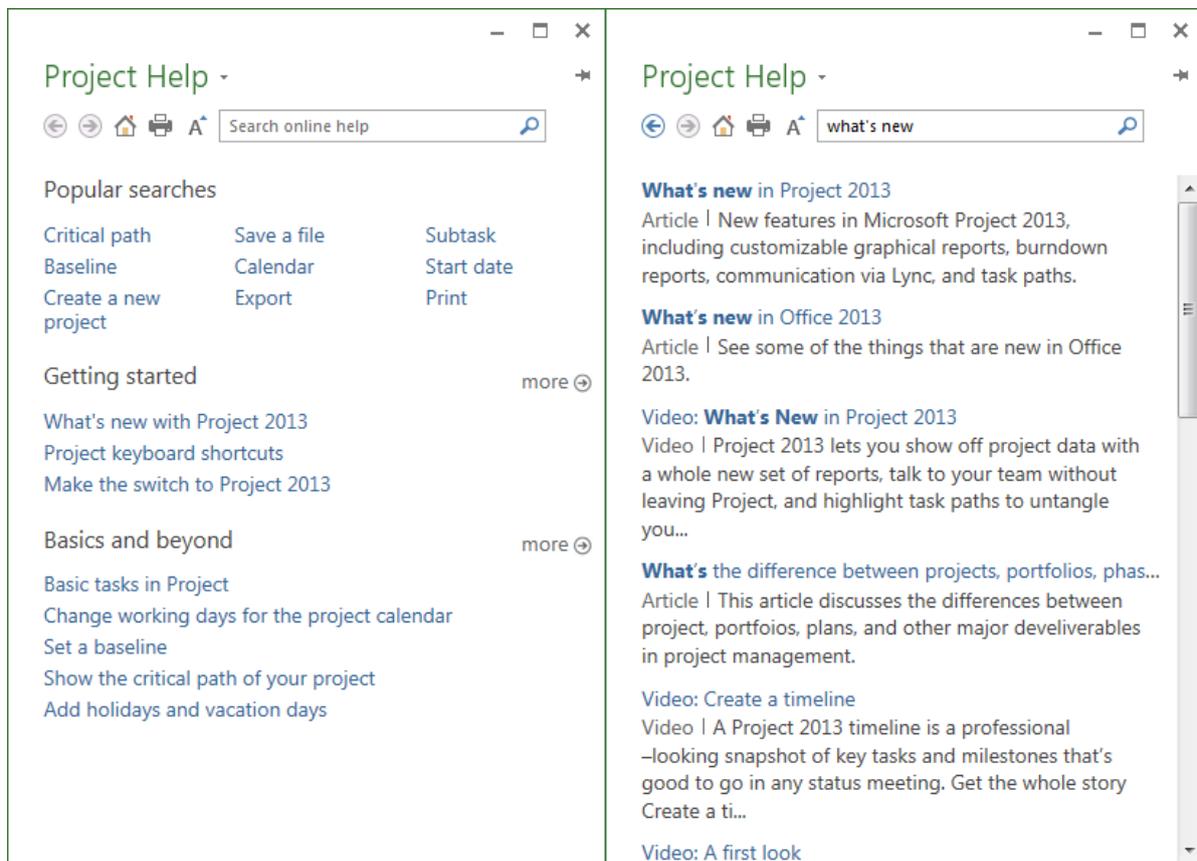
New to Project 2016 and across other Microsoft Office 2016 is a box to the right of the ribbon tabs with the prompt 'Tell me what you want to do'.

Type is a feature and Project 2016 actually does what you ask! For example if you select some tasks and type 'Link tasks' or 'Indent tasks' Project does it for you.



The Tell Me Box keeps a list of recently asked questions for later use and can offer other related suggestions to try.

1. Click on **Help**  or press **[F1]** to display the Help dialog box:
2. Type a word or phrase and click **Search**  to find help on that specific topic:



3. Click on any of the blue hyperlinks to display the various help topics
4. **Exit** the Help system by clicking the red **Close** button X

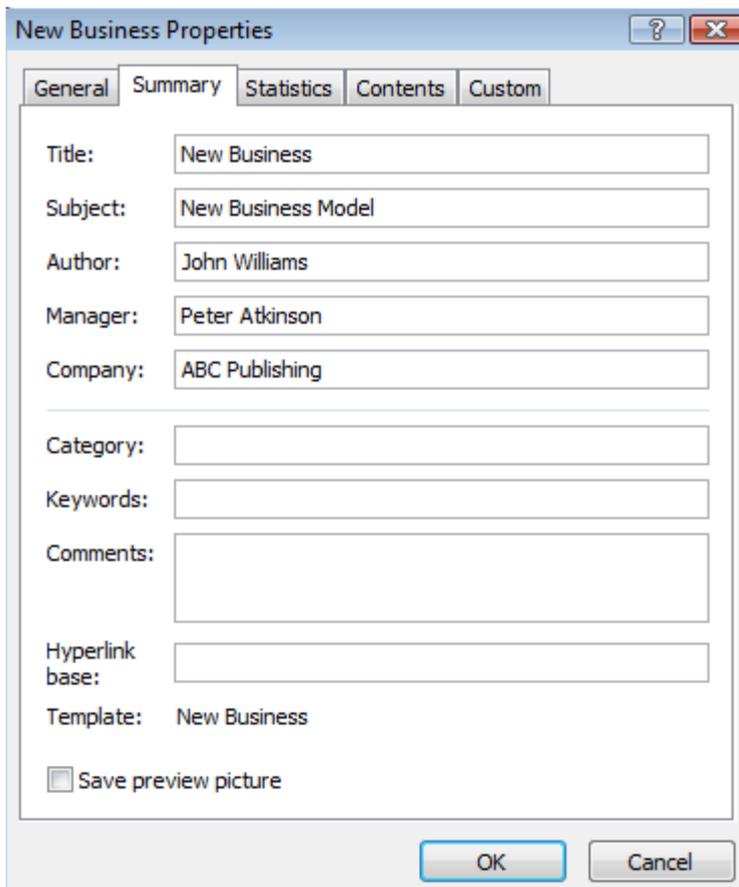
**Note:** The Project Guide is no longer available in Project 2016.

## Basics of the Project Environment

Follow a checklist when setting up new projects. Your checklist will evolve to match the requirements of your organisation:

### Simple Check-List

File → Info → Project Information → Advanced Properties → Summary tab - enter the Project Title and other relevant information (can re-use this later in reports.)



The image shows a screenshot of the 'New Business Properties' dialog box, specifically the 'Summary' tab. The dialog box has a title bar with a question mark and a close button. Below the title bar are five tabs: 'General', 'Summary', 'Statistics', 'Contents', and 'Custom'. The 'Summary' tab is selected. The form contains the following fields and controls:

- Title: New Business
- Subject: New Business Model
- Author: John Williams
- Manager: Peter Atkinson
- Company: ABC Publishing
- Category: (empty)
- Keywords: (empty)
- Comments: (empty)
- Hyperlink base: (empty)
- Template: New Business
- Save preview picture

At the bottom of the dialog box are two buttons: 'OK' and 'Cancel'.



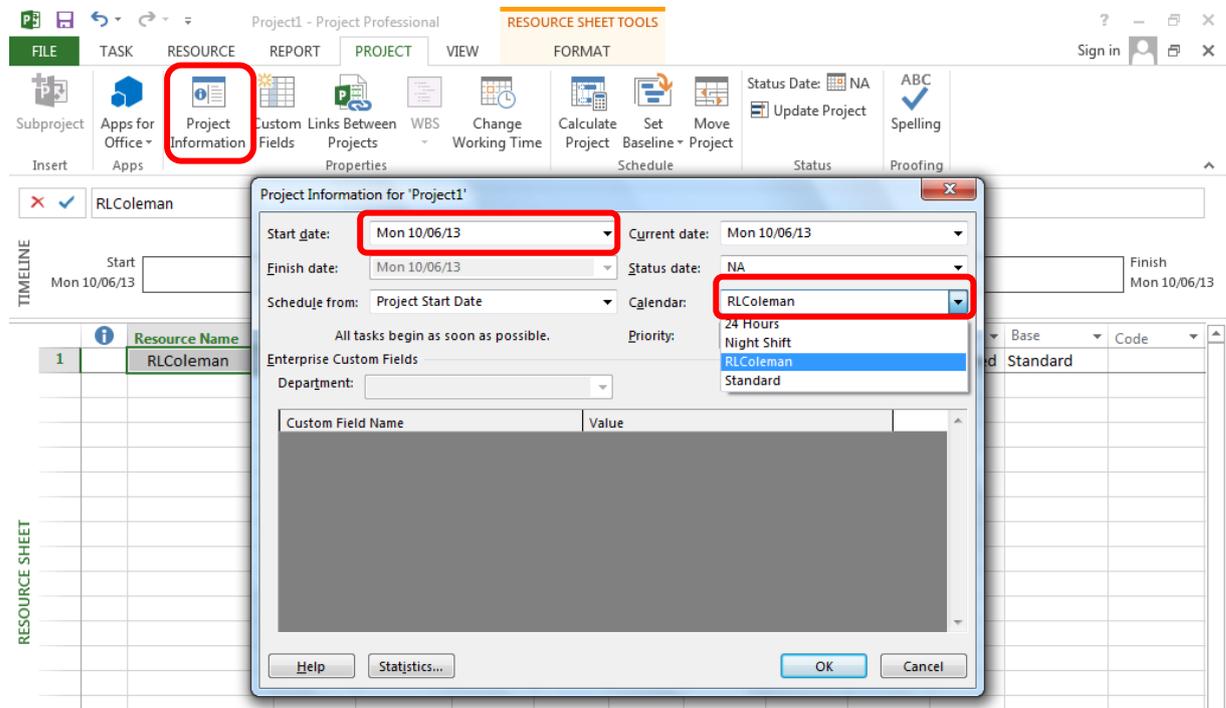
2. File → Info → Organiser → Calendars tab → select new calendar from the right side and click Copy. This will make your new company calendar available for all new projects.

The screenshot shows the Microsoft Project Professional interface. On the left is a green ribbon with options: Info, New, Open, Save, Save As, Print, Share, Export, Close, Account, and Options. The main area is titled 'Info' and contains two sections: 'Project Web App Accounts' (with a 'Manage Accounts' button) and 'Organize Global Template' (with an 'Organizer' button highlighted by a red box). To the right is a 'Project Information' table:

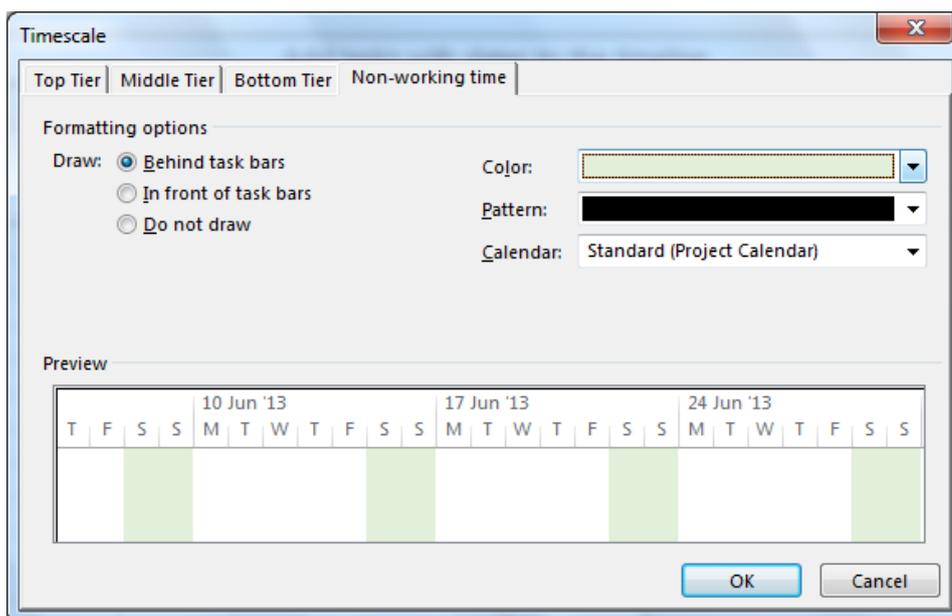
Project Information	
Start Date	Today
Finish Date	Today
Schedule from	Start
Current Date	Today
Status Date	Today
Project Calendar	Standard
Priority	500

The 'Organizer' dialog box is open, showing two panes: 'Global.MPT' and 'Project1:'. The 'Project1:' pane has 'RLColeman Standard' selected. A red box highlights the '<< Copy' button between the panes. Below the panes are 'Calendars available in:' dropdowns for 'Global.MPT' and 'Project1'. Other buttons in the dialog include 'Cancel', 'Rename...', 'Delete...', and 'Help'.

- Project → Project Information → Start Date - enter the estimated start date of your Project and from the Calendar drop-down arrow select your new calendar as the project calendar.



- Right-Click Gantt chart → Nonworking Time → draw non-working time in front of task bars to make the Gantt Chart easier to read and then select the Project Calendar from the Calendar drop-down.



## Task Creation

---

This is the initial activity in setting up a new project. The system will hold task information in a Task database, used by the system whenever we view task data. This is one of three databases the system uses, the others being the Resource database and the Assignment database.

The order of entry for tasks does not need to follow any set pattern: to keep the Gantt Chart as simple as possible, enter your tasks in approximate chronological order, but this is by no means essential.

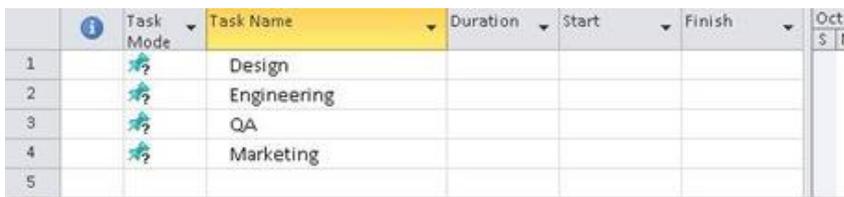
There is no need to enter all the tasks at this stage: additional tasks can be inserted, tasks can be moved, copied or deleted. A practical approach is to initially enter only the main tasks (Summary Tasks) and afterwards fill in the detailed tasks (Subtasks): this is a 'brainstorming' stage where you and the project team are recognising all the tasks necessary to meet the project's objectives. This method is also known as **Top-down Planning**.

*Do not at this stage be concerned regarding the resources for each task or the duration: concentrate on thinking of all the requirements which need to be covered by creating the necessary tasks.*

## Manual Scheduling vs. Auto Scheduling

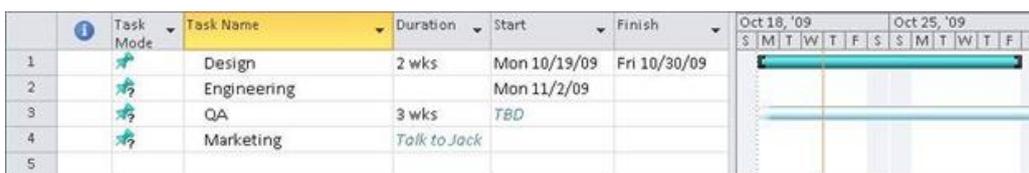
In Project there is a new concept called 'User-Controlled Scheduling'. It's a collection of features designed to make Project a more flexible planning and schedule management tool. The idea is that you, as the project manager, can have complete control over when a task should happen. If and when appropriate, you can leverage Project's powerful scheduling engine to help forecast the date of a task based on various factors like dependencies, calendar, constraints, etc. But at any time, you have the flexibility to manually override Project's automatic calculations to better capture all of the high-level, possibly vague information that you have when you start your project.

Tasks are by default "Manually Scheduled", meaning that you have complete control over their dates. For example, when you start typing tasks the Start, Finish & Duration fields are blank. When tasks are in this 'Manually Scheduled' mode, Project will not automatically calculate and fill in dates for you.



	Task Mode	Task Name	Duration	Start	Finish	Oct 18 '09
1	?	Design				
2	?	Engineering				
3	?	QA				
4	?	Marketing				
5						

If you have specific dates for some tasks and just a rough idea for others you can enter the information, even using text in the duration, start or finish columns:

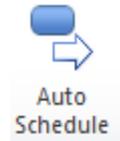


	Task Mode	Task Name	Duration	Start	Finish	Oct 18, '09	Oct 25, '09
1	?	Design	2 wks	Mon 10/19/09	Fri 10/30/09		
2	?	Engineering		Mon 11/2/09			
3	?	QA	3 wks	TBD			
4	?	Marketing	Talk to Jack				
5							



An example where "Manually Scheduled" mode could be useful is when a task's predecessor slips. Instead of automatically moving the linked task, a red squiggle underneath the Finish Date indicates a potential problem. This gives you, the project manager, a better way of spotting problems and a chance to decide on a mitigation plan.

At any point, if you wish to have Project calculate your schedule for you instead of maintaining manual control, you can toggle your tasks to 'Auto Schedule' mode. When tasks are Auto Scheduled, Project will calculate and update their dates automatically just like it has always done in previous versions.



## Setting Auto Scheduling by Default

If you want to set all new projects to use Auto Scheduling select:

### File, Options, Schedule

For In Scheduling Options for this project change to **All New Projects**.

In New Tasks select **Auto Scheduled**.

## Using the Gantt Chart to enter tasks

The most user-friendly way to enter tasks is to use the Gantt Chart view with the Entry table and the Insert commands on the Task tab:



1. Click the Summary command to insert your first main task and overwrite the placeholder text with the correct task/phase name:

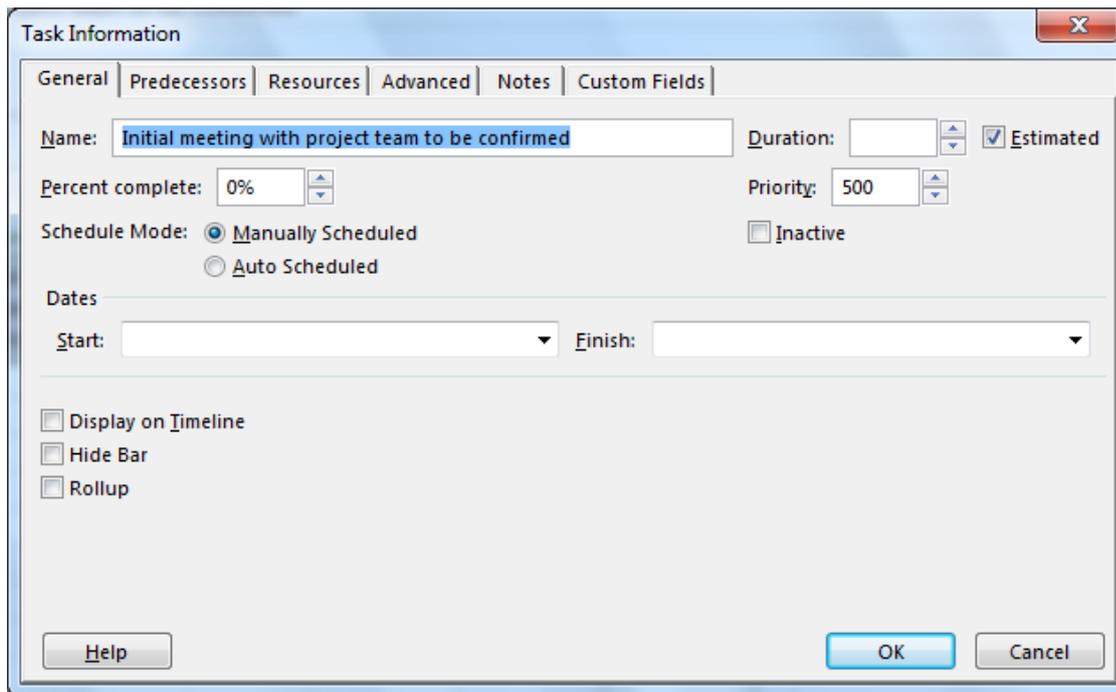
Task Mode	Task Name	Duration	Start	Finish	28 Dec '09							
					S	M	T	W	T	F		
	<New Summary Task>	1 day	Wed 30/12/09	Wed 30/12/09								
	<New Task>											

2. Click the Task command to enter more subtasks
3. Continue adding as many Summary tasks and subtasks as you require – you will need to make sure that the Summary tasks are entered at the right outline level and you can indent/outdent them  by using the command buttons on the schedule group of the **Task** tab

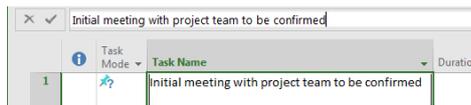
4. You can write long, descriptive task names – the text should wrap automatically in the cell and you can also change the column width if required:



5. the Undo button on the Quick Access Toolbar will undo your recent actions: by default up to 20 actions, but you can increase this to a maximum of 99 actions (on the File, Options, Advanced tab)
6. The cells which are affected by your last modification are automatically temporarily highlighted in a blue colour so you easily see if other cells have been affected by the change
7. It is possible to use In-Cell Editing but you may prefer to double click the task and make the changes on the general tab of the Task Information Dialog Box:



Alternatively use the Entry Bar to edit a task name.



To show the Entry bar select File, Options, Display, tick Entry Bar.

## Create the Work Breakdown structure

### Manually outlining tasks into summary tasks and subtasks

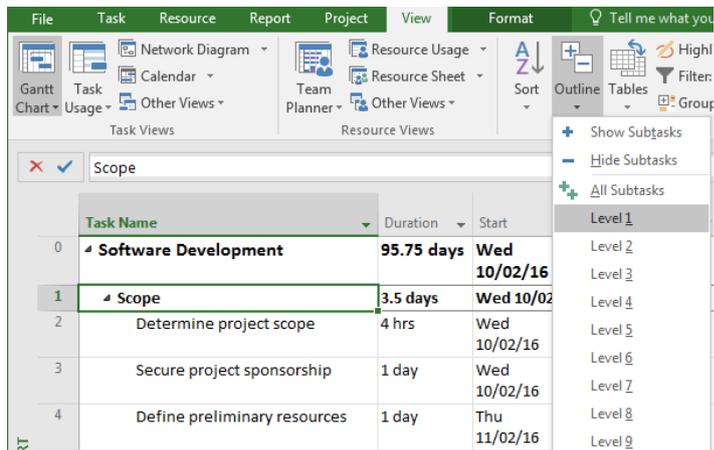
Subtasks are defined by being **indented** - the Task above **automatically** becomes a Summary Task formatted in **bold**.

1. Select the Task(s) in the Task Name column
2. Click the **Indent**  command on the **Tasks** tab to make it a sub task and note the task above it becomes bold

Tip: more than one Task can be indented/ outdented at once by selecting the required Tasks with the mouse before the indent/ outdent operation

## Choosing to show all subtasks or a specific outline level

- You can click the  outline button next to the summary task name to show/hide the subtasks
- On the **View** tab, choose the **Outline** command to choose which level of subtasks are displayed:



## Modifying a Task List

---

### Inserting an additional task

1. Select the Task that is to appear immediately below the inserted Task
2. Click the relevant command button to insert a Summary or Task.

Tip: You can also press the Insert key (Ins) on the keyboard

Note: The Task ID numbers will automatically change

### Deleting a task

1. Select the whole Task record by clicking on the Task ID number
2. Press the Delete key (DEL) on the keyboard.

Note: The Task ID numbers will automatically change

### Moving a task

#### Drag and drop

1. Select the **whole Task** on the ID number
2. **Release** the mouse button
3. Hold down the mouse button while you drag and drop the Task to the new position already visible on the screen – the task is inserted between existing tasks

#### Cut and paste

1. Select the **whole Task** on the ID number
2. Click the **Cut** command
3. Click on the Task Name of the task which is to be **below** the moved Task
4. Click the **Paste** command

## Copying a task

---

### Drag and drop

1. Select the whole Task on the ID number
2. Release the mouse button
3. Hold down the Ctrl key while you drag and drop the Task to copy to the new position already visible on the screen – the copied Task is inserted between existing tasks.

### Copy and Paste

1. Select the **whole Task** on the ID number
2. Click the **Copy** button
3. Click on the Task Name of the task which is to be **below** the moved Task
4. Click the **Paste** button – the copied Task is inserted between existing Tasks

## Using AutoFill to enter repeat data

---

As in Microsoft Excel, in any table view in Project you can use the **'Fill Handle'** for fast entry of repeat information. For example, you don't have to type out repeat durations or resource names:

4	Define preliminary resources	1 d	08/01/08	09/01/08	3	Project manager
5	Secure core resources	1 d	09/01/08	10/01/08	4	Project manager
6	Scope complete	0 d	10/01/08	10/01/08	5	
7	Analysis/Software Requirements	15 d	10/01/08	31/01/08		
8	Conduct needs analysis	5 d	10/01/08	17/01/08	6	Analyst
9	Draft preliminary software specifications	3 d	17/01/08	22/01/08	8	Analyst
10	Develop preliminary budget	2 d	22/01/08	24/01/08	9	Analyst
11	Review software specifications/budget with team	8 h	24/01/08	25/01/08	10	Analyst
12	Incorporate feedback on software specifications	1 d	25/01/08	28/01/08	11	Analyst
13	Develop delivery timeline	1 d	28/01/08	29/01/08	12	Analyst
14	Obtain approvals to proceed (concept, timeline, budg	8 h	29/01/08	30/01/08	13	Analyst
15	Secure required resources	1 d	30/01/08	31/01/08	14	Analyst
16	Analysis complete	0 d	31/01/08	31/01/08	15	
17	Design	14.5 d	31/01/08	20/02/08		
18	Review preliminary software specifications	2 d	31/01/08	04/02/08	16	Analyst
19	Develop functional specifications	5 d	04/02/08	11/02/08	18	Analyst
20	Develop prototype based on functional specifications	4 d	11/02/08	15/02/08	19	Analyst
21	Review functional specifications	2 d	15/02/08	19/02/08	20	Management

Click the bottom right corner of the cell and drag

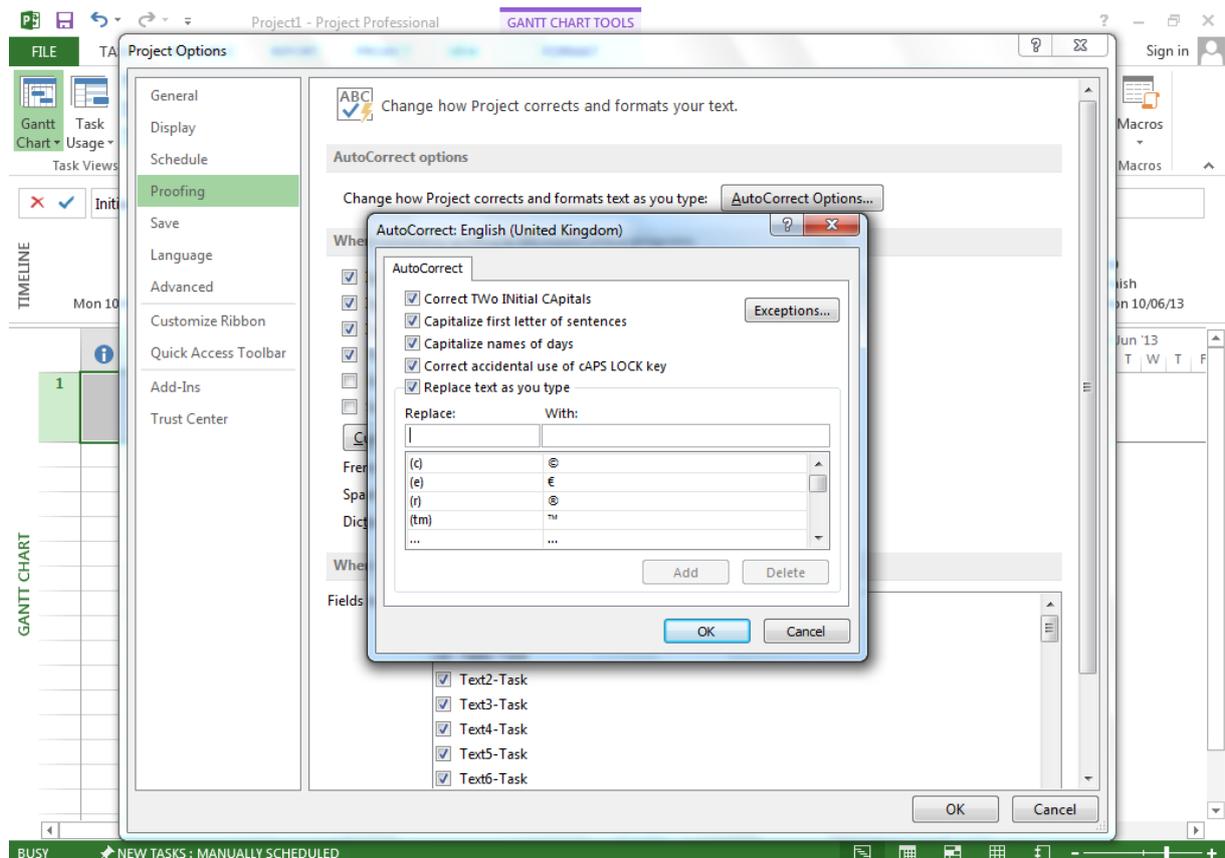
## Using AutoComplete

Like with Excel, when you type something similar to information that is already in the same column of data, Project will automatically offer to complete the entry.

## Using AutoCorrect

AutoCorrect automatically corrects mistyped words and expands abbreviations as you type. Project provides an extensive list of predefined typing corrections and abbreviations, and enables you to customise the list by adding your own:

1. Click the File Tab, choose Options, choose Proofing
2. Type the name of the entry in the Replace text box.
3. Type the name of the replacement in the 'With' text box.
4. Click Add and then click OK



## Entering a milestone task

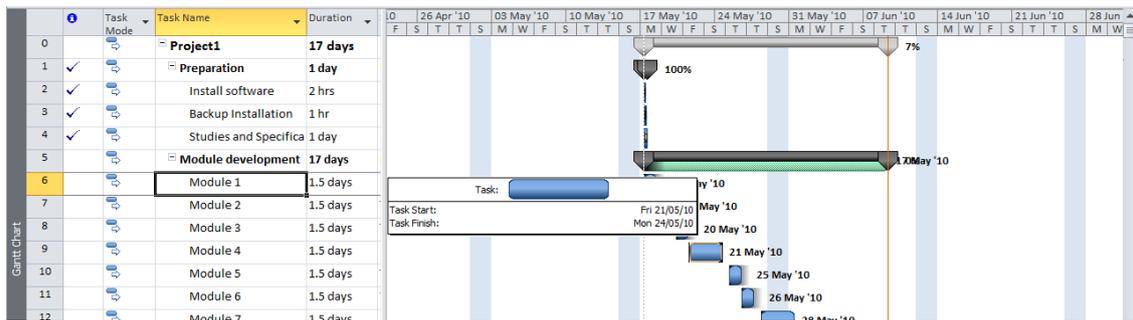
Select where you want to insert the task and click the Milestone command. Note the Duration is zero and the format of the Milestone symbol on the Gantt chart is:  01/01



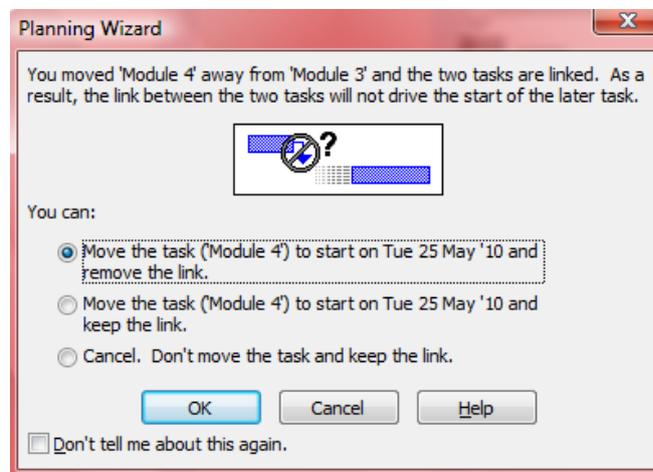
## Editing Tasks using the Gantt Chart

One method of editing tasks is to change them on the Gantt Chart using the mouse and dragging:

1. Positioning the pointer at the beginning of a bar will change the pointer to a % sign and dragging with the mouse to the left will update the percentage complete of the task.
2. If the pointer is placed in the centre of the bar it will change to a four-way arrow pointer. It is then possible to drag the bar to the left or right. A label will appear informing you of what you are doing:



If you change a date that then causes a conflict, the Planning Wizard dialog box will alert you of the problem:



- The duration of the task can be changed by changing the length of the bar. If the pointer is positioned at the right end of the bar it will change into a right pointing arrow. You can then drag to change the length of the bar.

## Tips for naming tasks and setting level of detail

**Summary tasks:** use a broad description ("selection phase", "User testing")

**Tasks:** verb + noun are often enough ("Brief consultant", "Install transformer")

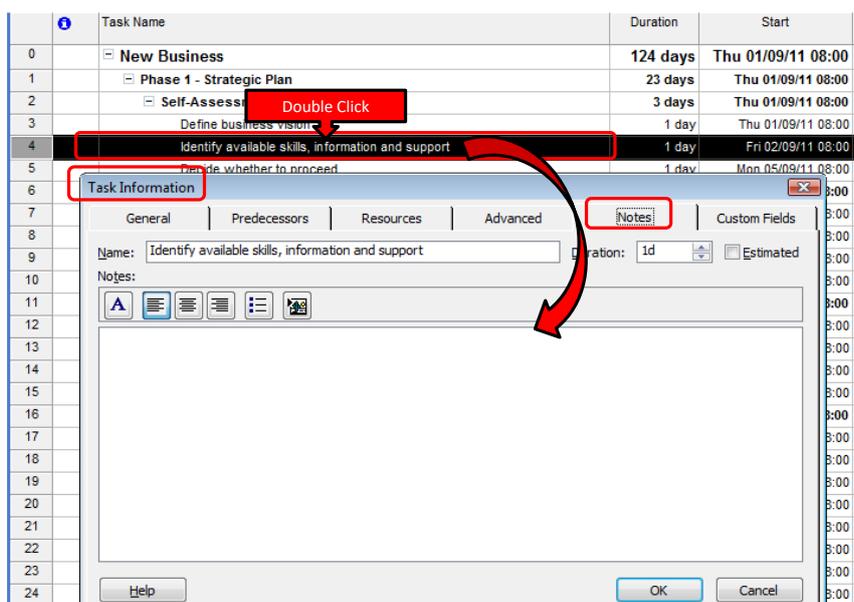
**Milestones:** describe a point in time, a start/end ("start of review", "testing completed")

To find the right level of detail for your tasks aim for tasks that:

- have durations that can be reasonably estimated
- are hard to divide into smaller tasks
- will be easy to measure progress / completion
- are self-contained
- are likely to be carried out by parties outside your project

If you still need to add further detail you can avoid having to create more tasks by adding the additional information into the task notes tab (double click on the task name)

**Add Notes** to tasks to provide details - double click the task name and go to Notes tab



# Scheduling Tasks

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## Working with Base Calendars

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Calendars are used by Project to determine when the work by the resources assigned to that task can proceed.

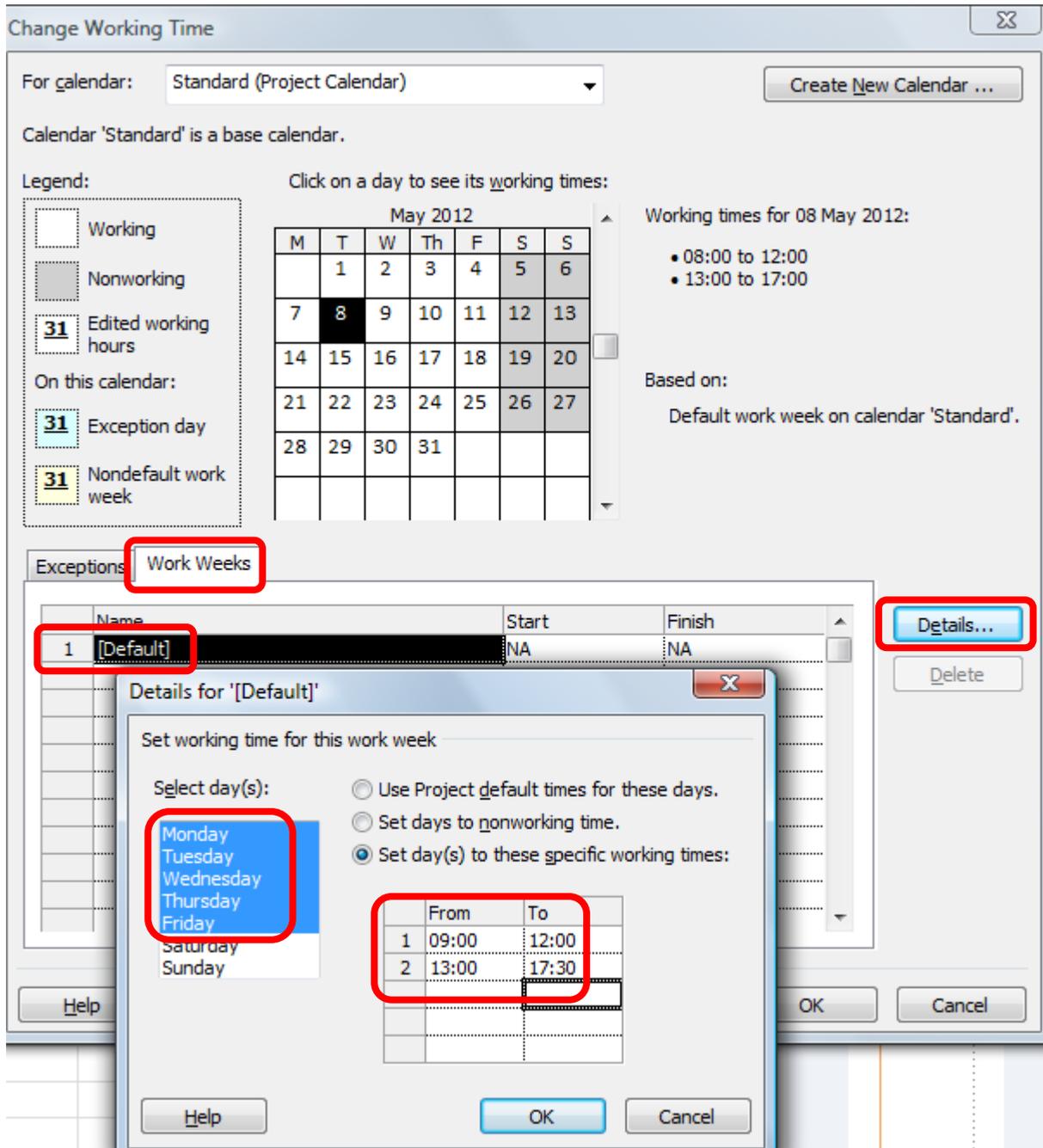
Microsoft Project comes with three base calendars of working and non-working time: Standard, 24-Hours and Night Shift. By default, the Microsoft Standard Calendar is used. You can amend any of the base calendars or create your own and you can assign different resources to different calendars. For tasks to which no resources have been assigned, the base calendar you choose to be the 'Project Calendar' is used. The 'Project Base Calendar' is set in the Project Information dialog box.

It is important that you amend the Calendars because no bank holidays or festivals are included in the Standard calendar.

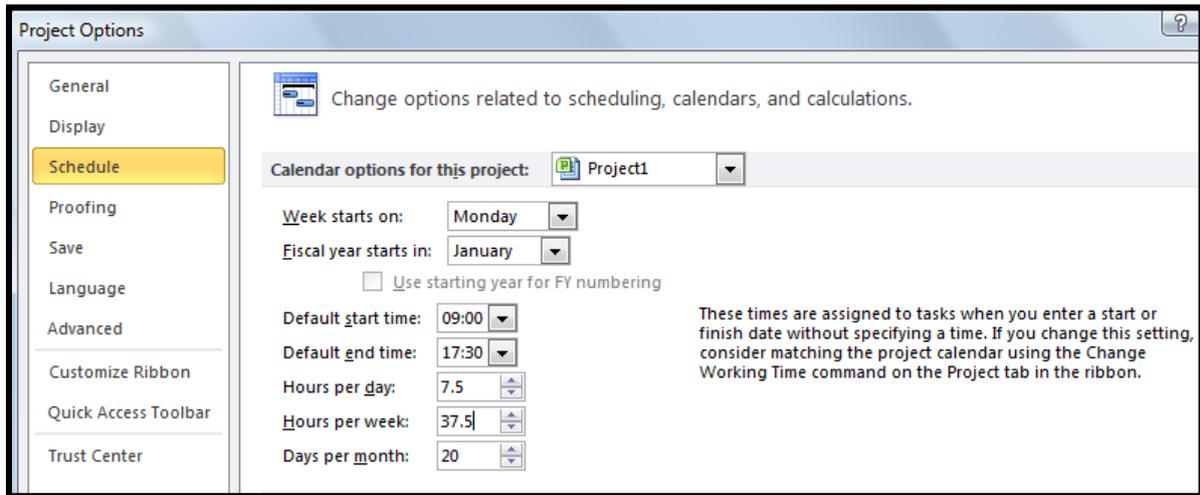
**Note:** Whilst all calendars will be applied, the Gantt Chart can only display one calendar - the vertical grey columns indicate the non-working time in the calendar which is currently chosen to be displayed.



- Below the calendar choose the Work Weeks tab. Make sure Default is highlighted then click on Details



- Select Monday to Friday from the Select Day(s) list
- Select the option to Set day(s) to these specific working times:
- Using the form on the right of the dialog box enter the pattern of work that will follow on those days(e.g. 9:00 to 12:00 and 13:00 to 17:30) then click OK
- Click on the Options button and a new dialog box appears



1. Set the default start and end times to 9:00 and 17:30 respectively
2. Set the Hours per day to 7.5 and Hours per week to 37.5

Note: If your revised hours apply only to this project click OK, alternatively if all your projects will follow these new hours click set as default

3. Finally confirm your project start time is correct. To help you do this set Project to show task times as well as hours. Go to File then choose Options → General Project → View → Date Format. Choose a date format that also includes time and click OK.
4. From the Project ribbon choose Project Information. Check the start date and time of your project and if necessary bring it into line with the new start time for your tasks. Click OK. Go back to options and set the date format back to date only.
5. If your project already contains tasks you will need to correct their durations, *therefore it is best practice to set the calendar options first and then add tasks.*
6. New tasks will align with the new hours you have applied.

# Creating Task Dependencies

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## Linking tasks

Each task has a Start and a Finish. These can be used to connect one task to another using a dependency or link. Linking your tasks lets Project adjust the schedule as tasks change.

## Types of task dependency

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### Predecessors and successors

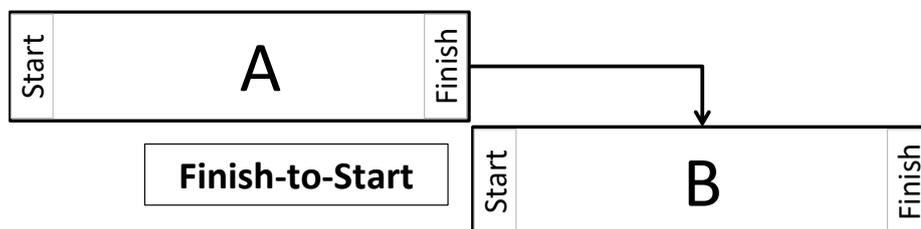
When tasks are connected they take on the following roles:

**Predecessor** is the task whose start or finish drives the start or finish of the successor

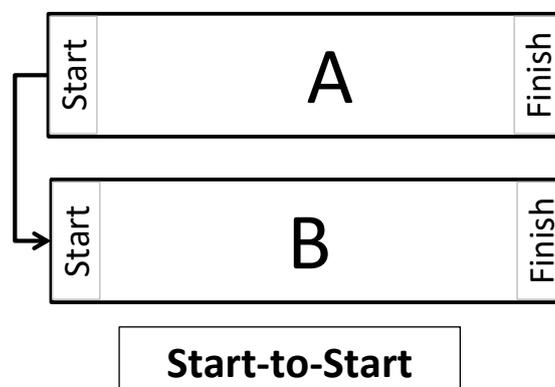
**Successor** is the task whose start or finish is driven by the predecessor task

There are four types of dependency that can link Predecessors and Successors. You choose the type that best describes the relationship between them:

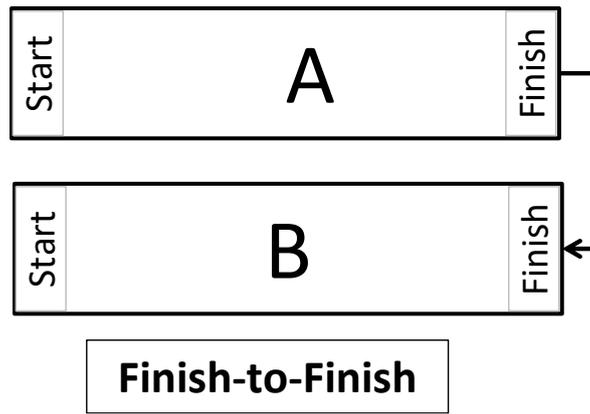
**Finish to Start (FS)** - Finish of Predecessor drives **Start** of Successor



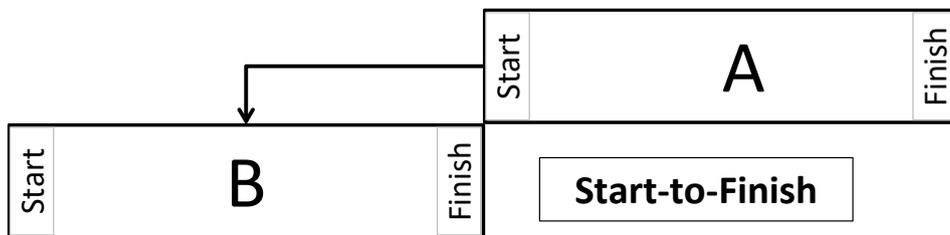
**Start to Start (SS)** - Start of Predecessor drives **Start** of Successor



**Finish to Finish (FF)** - Finish of Predecessor drives **Finish** of Successor



**Start to Finish (SF)** - Start of Predecessor drives **Finish** of Successor



## Five ways to create task links

1. Block-select the tasks to be linked (use Click with the Ctrl key held down to select tasks that are not adjacent) and click the link button on the Schedule group on the Task ribbon.

The screenshot shows the Microsoft Project Professional interface. The 'TASK' ribbon is active, and the 'LINK' group is expanded. The 'Link the Selected Tasks (Ctrl+F2)' dialog box is open, showing options to link tasks. The task list below shows the following tasks:

ID	Task Name	Duration	Start
1	Start Manual	0 days	Mon 10/06/13
2	Research Phase	2 days	Mon 10/06/13
3	Interview subject matter	2 days	Mon 10/06/13
4	Search the web	1 day?	Mon 10/06/13
5	Outline Phase	5 days	Mon 10/06/13
6	Create outline	5 days	Mon 10/06/13
7	Present to Publisher	1 day	Mon 10/06/13
8	Revise Outline	3 days	Mon 10/06/13
9	Review with subject matter	3 days	Mon 10/06/13
10	Outline complete	0 days	Mon 10/06/13

2. Hover the mouse over the middle of the predecessor bar on the Gantt Chart, left click and drag a link up/down to its successor
3. Double click on the name of a task, on the predecessors tab choose the name of the predecessor(s) and set the link type
4. On the successor task row, in the predecessor column enter the ID number of the predecessor followed by the initials of the relationship (e.g. 11FS)
5. Split the screen and in the top half of the screen select a task that will be the successor and in the lower right half of the screen click below task name to choose the predecessor and type of link. Click OK to commit the change.

## Breaking links

6. Double click on dependency line between the tasks, from the task dependency dialog box that appears click delete.
7. Highlight or Ctrl click the tasks to be disconnected and click the unlink tasks button on the Schedule group on the Task ribbon.
8. Double click on the task name. On the predecessors tab click on the predecessor to remove and press the delete key.
9. On the successor task row, in the predecessor column delete the values in the cell.
10. With a split screen in the lower right half of the screen select the predecessor to remove and press delete.

## Using Lag (delay) & Lead time

To model delay between tasks you can either:

- Double click on the arrow linking the tasks or
- Double click on the name of the successor and choose the predecessor tab then
- In the lag field add the number of days, estimated days or % delay

A negative value produces “lead” rather than lag, and brings the successor earlier into the plan as opposed to delaying it.

The screenshot shows the Microsoft Project Professional interface. The 'GANTT CHART TOOLS' ribbon is active, with the 'TASKS' group selected. Below the ribbon, the 'Interview subject matter' task is highlighted. A 'Task Dependency' dialog box is open, showing the following details:

- From: Start Manual
- To: Interview subject matter
- Type: Finish-to-Start (FS)
- Lag: 0d

The dialog box has 'Delete', 'OK', and 'Cancel' buttons. In the background, a Gantt chart is visible with tasks listed in a table:

Task ID	Task Name	Duration	Start Date
1	Start Manual		
2	Research Phase		
3	Interview subject matter		
4	Search the web		
5	Outline Phase		
6	Create outline		
7	Present to Publisher	1 day	Thu 20/06/13
8	Revise Outline	3 days	Fri 21/06/13
9	Review with subject matter	3 days	Wed 26/06/13
10	Outline complete	0 days	Fri 28/06/13

## Setting Constraints

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Use constraints to model dates that affect the start or finish of your tasks. In addition to the constraint and date you set, Project will also take into account other factors such as calendars, resource availability and dependencies when calculating where to place the task on the chart.

All automatically scheduled tasks have a constraint. By default this is set to As Soon As Possible (ASAP). This means that unless another task or link gets in the way Project will position the task as early in the plan as it can.

### Constraints can be modified by:

Double clicking on the name of the task to be constrained then from the advanced tab choose the constraint type and if appropriate add a date:

<b>As Late As Possible</b> (ALAP)	the task will take place as late it can
<b>Finish No Earlier Than</b> (FNET)	models a task that is not able to finish before a certain date, but could be delayed beyond it
<b>Finish No Later Than</b> (FNLT)	is used to describe tasks that are not able to finish beyond a date, but are able to finish earlier
<b>Must Finish On</b> (MFO)	positions the task's finish on the specified date
<b>Must Start On</b> (MSO)	as MFO but positions the task's start on the specified date.
<b>Start No Earlier Than</b> (SNET)	the task starts on or after the specified date but no earlier
<b>Start No Later Than</b> (SNLT)	for activities that must start on or before a specified date.

## Setting Deadlines

Deadlines added to a task show the date when it should finish but won't prevent the task being delayed beyond that date. Instead an alert icon appears in the indicators column if the task finishes later than its deadline. To add a deadline to a task:

- Double click the task
- On the advanced tab enter a date in the Deadline box and click OK. On the Gantt Chart a green arrow indicates the deadline for the task.
- To remove a deadline double click the task and delete the date from the deadline field then click OK

The screenshot displays the 'Task Information' dialog box for the task 'Define business vision'. The 'Advanced' tab is active, showing the 'Deadline' field set to 'Tue 23/08/11'. A calendar pop-up is visible, highlighting the date 23. A callout box with a black border and white text states: 'A deadline has been added to this task... indicated by the arrow'. A red arrow points from this callout to the 'Manager' task in the Gantt chart, where a green arrow icon is visible in the indicators column. The Gantt chart shows three tasks: 'Self-Assessment' (3 days), 'Define business vision' (1 day), and 'Identify available skills' (1 day). The 'Manager' task is a resource assigned to the 'Define business vision' task.

# Introduction to Resources

Resources are best defined using the Resource Sheet, which can be accessed via the Quick Access toolbar, the View ribbon, the Task ribbon, the Resource ribbon or the View bar.

The screenshot shows the Microsoft Project interface. The 'RESOURCE SHEET TOOLS' ribbon is active, with the 'VIEW' group containing the 'Gantt Chart View' button highlighted with a red box. Below the ribbon is a 'TIMELINE' section with a calendar view from Mon 10/06 to Fri 28/06. The main area is the 'RESOURCE SHEET' table, which lists resources with their names, types, materials, initials, groups, maximum units, standard rates, overtime rates, cost per unit, accrual methods, and base types.

	Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt.	Cost/Use	Accrue	Base
1	Editor	Work		E	Internal	100%	£10.00/hr	£0.00/hr	£0.00	Prorated	Standard
2	Printer	Work		P	External	100%	£5.00/hr	£0.00/hr	£0.00	Prorated	Standard
3	Staff Assistant	Work		S	Internal	100%	£0.00/hr	£8.50/hr	£0.00	Prorated	Standard
4	Subject matter expert 1	Work		S	internal	100%	£0.00/hr	£55.00/hr	£0.00	Prorated	Standard
5	subject matter expert 2	Work		s	internal	100%	£0.00/hr	£55.00/hr	£0.00	Prorated	Standard
6	Writer	Work		W	internal	100%	£25.00/hr	£0.00/hr	£0.00	Prorated	Standard
7	Artist	Work		A	external	100%	£14.00/hr	£0.00/hr	£0.00	Prorated	Standard
8	Glossy Paper	Material		G	external		£40.00		£0.00	Prorated	

## Creating Resources

Each resource is entered on its own line as follows:

### Basic resource properties

**Name** Enter an appropriate name for the resource. This can either be the name of an individual, a job role or a team name for generic resources.

**Type** Resource types can be **work**, **material** or **Cost**.

Use the **Work** resource type for people and equipment whose availability is capped (Max Units) so you can see if they become over-allocated.

Use the **material** resource type if the resource is a consumable.

Use the **cost** resource type to track variable items such as expenses. The rate for this type of resource is not stored in the resource sheet. Each time this resource is assigned to a task you can enter the cost that applies just to that task.

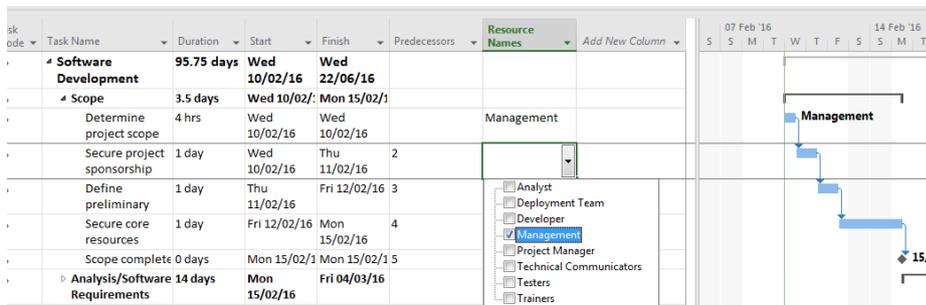
<b>Material Label</b>	Only applicable for material resources. This is the volume that the resource is purchased in. For example paint might be purchased in litres.
<b>Initials</b>	An alternative to having the full name beside bars on the GANTT chart
<b>Group</b>	Can be used to categorise resources appropriately for reports, filters and grouping. Typical uses are team names, departments, subcontractors etc.
<b>Max Units</b>	The maximum number of units of the resource. 100% generally means one individual; 300% 3 individuals. (Work type only)
<b>Standard Rate</b>	Cost of standard work, can be recorded as Hourly/Daily/Weekly/Monthly/Yearly e.g. £200/d for a daily rate
<b>Overtime Rate</b>	Cost of resource when work is specified as overtime. (work type only)
<b>Cost/Use</b>	A one off cost associated with the resource. Is charged every time resource is allocated to a task. Can also be used in addition to Standard Rate.
<b>Accrue At</b>	Determines if the resource costs are charged at the start of the task; throughout the task, or at its end.
<b>Base Calendar</b>	The base calendar which determines the resource's working time. (Work Type only)
<b>Code</b>	A general code that can be used to identify the resource or resource group. A typical example would be a cost centre code.

## Assigning Resources to Tasks

There are several ways to assign resources; from the Resource Names column on the task sheet, by double clicking a task and choosing the Resource tab or by using the split screen details view. A further way is to choose Assign Resources on the Resource ribbon tab. This is the initial resource allocation. We will look later at how and what happens if changes are made to these assignments.

### Assigning from the Resource Name column

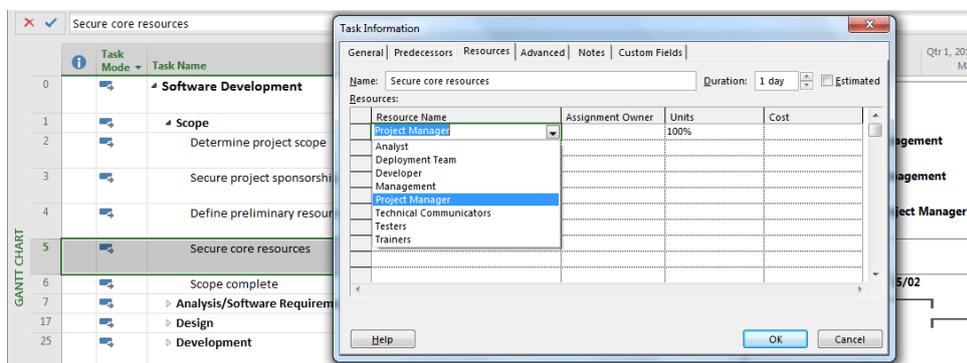
Resources can be assigned to tasks by choosing their names from the Resource Names column in the Task Sheet. Click on the arrow that appears when you move to the Resource Names column then tick the resource to assign.



Once the resource is assigned its name appears on the Gantt Chart to the right of the task bar.

### Assigning Resources from the Task Information.

Another way to assign resources is to double click the task (or choose Task, Information)



This assigns 100% to the Units column which means 1 person assigned. This is a good way to assign resources where only part of their time is required on that task (for example 50% units). Also, for example if there were 2 developers available it would be

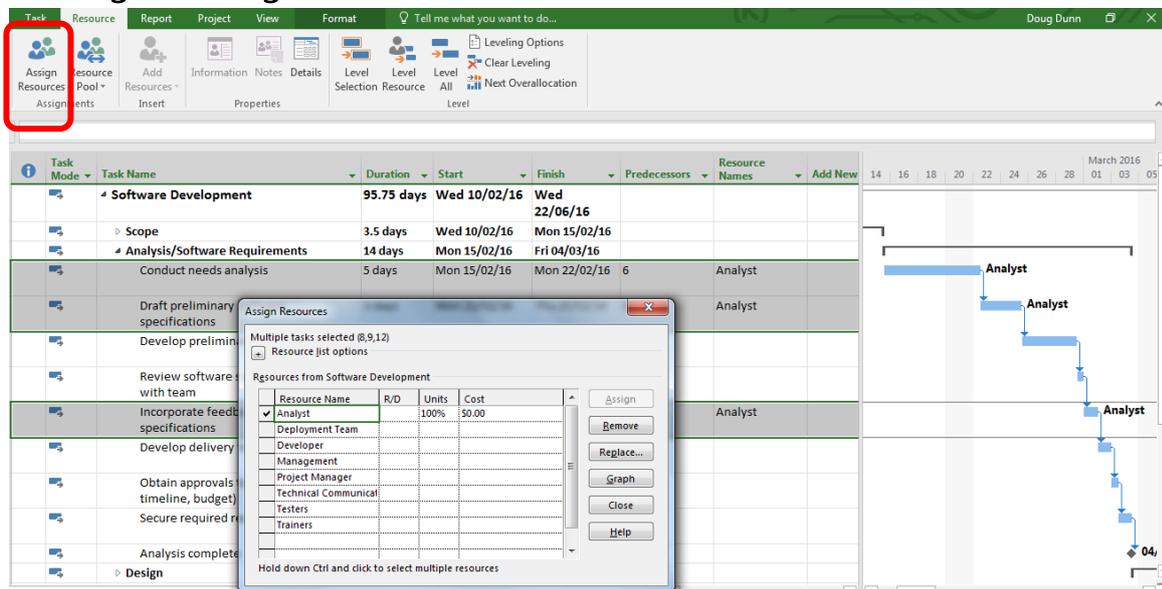
possible to enter 200% for the Units. However, to do this you would have to set the Max Units for Developers to 200% to prevent an over allocation.

## Assigning Resources in the Details Pane

1. In the Gantt chart view
2. Select View, click Details to split the window and show the Task Form view below the Gantt Chart
3. Select the task which is to be resourced

Then in the lower pane, under resource to assign and press OK.

## Clicking the Assign Resource



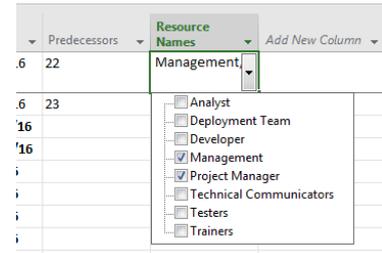
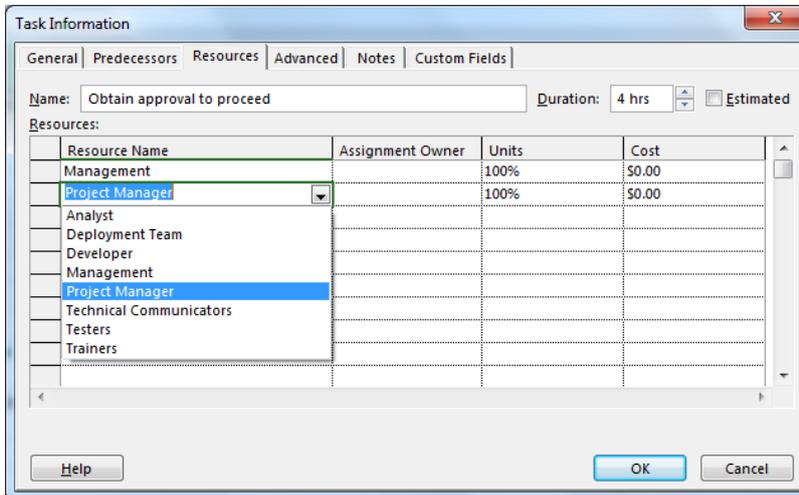
A further way to assign resources is by selecting Resource, Assign Resources.

This is especially helpful way assign a resource to multiple tasks at once. To do this:

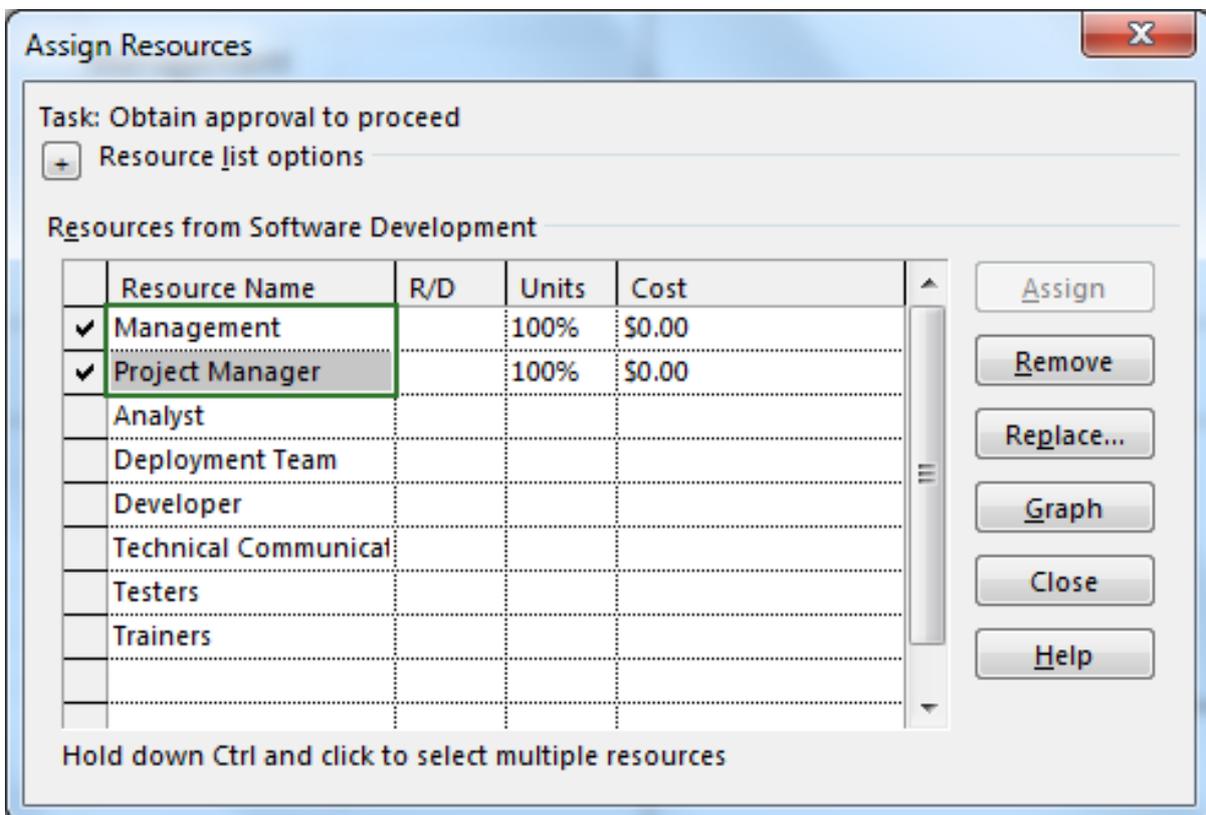
1. Select the first task then keeping the Ctrl key pressed click on the other tasks
2. Now select Resource, Assign Resources
3. Click the Assign button
4. Press the Close button

## Allocating multiple resources

Multiple resources can be assigned to a task by ticking them from the Resource Names column or by selecting a new row when assigning from Task Information or the details view.



If using the Assign Resources click one resource then press the Ctrl key and click on each other resource to assign then press the Assign button followed by Close.



## How Project schedules multiple resources

When multiple resources are allocated to a task Project will assume that each resource must work on the task for the specified duration. So if two resources are to work on a 2 day task, then each resource must work on it for 2 days. If both resources can work at the same time, then the total duration of the task will remain unchanged. If however, they are working at different times then the duration of the task will likely change.

### Example

A two day task starts on Monday and finishes on Tuesday. Two resources are then allocated to it.

Resource 1, works both Monday and Tuesday, thus finishing its contribution within the 2 day duration. Resource 2 however is on holiday on Monday, and therefore starts its 2 day contribution on Tuesday, finishing Wednesday.

Therefore the task starts on Monday with resource 1 and finishes on Wednesday with resource 2; thus having a new duration of 3 days.

## Modifying Resource Allocations

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When modifying a resource allocation, it is necessary to understand that you are changing one of three variables, *units of resource*, the other two being *task duration* and *work*.

### Fixed Units

The default setting for a task is Fixed Units. (See Information, Advanced tab, Task Type). This means that if a task duration is increased the Units remains fixed and it is the Work that increases. Similarly if the work done on a task is decreased then its duration will decrease. The Units will not change so it is called Fixed Units.

Work for a task can be entered for a task by selecting View, Details (split screen task view) To calculate how much work is done it is helpful to use this formula:

$$\text{Work} = \text{Duration} \times \text{Units of Resource}$$

If you modify a resource allocation by changing the Units of Resource then the duration of the task will change according to the same equation swapped around:

$$\text{DURATION} = \text{WORK} / \text{UNITS OF RESOURCE}$$

### Fixed Duration

There are times when you change the units of a resource but don't wish the task duration to change. For example, add an extra trainer to a workshop (100% to 200%) or adding extra managers to attend an interview panel. In those cases you can keep the task duration the same by changing the task type to Fixed Duration. What will change is the amount of work done.

### Fixed Cost

There are other times where you wish to increase duration of a task but keep the work on a task fixed. Normally the work would increase but to keep it fixed select the task type Fixed work. This also has the effect of keeping the cost of the task unchanged if the resource has been given a standard cost rate.

## Using Task Views

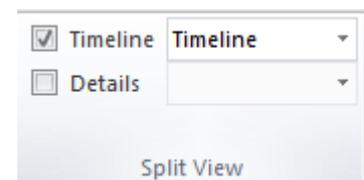
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### Working with the Timeline

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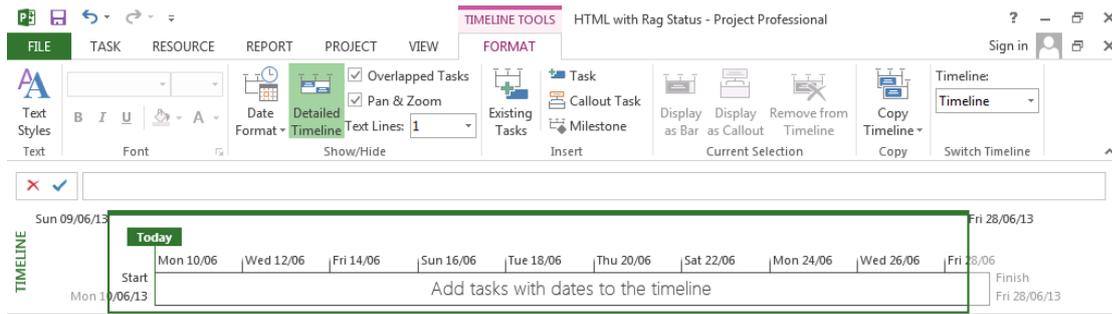
The Timeline is a new graphical feature that allows you to present a high level view of your project plan. The Timeline can then be shared with project stake holders via Office applications such as PowerPoint or Outlook.

To see and set up the Timeline select **View, Timeline**.



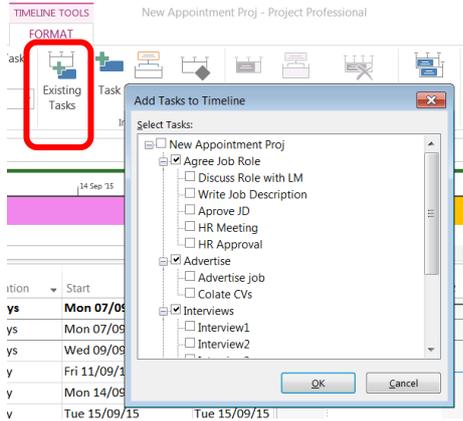
### Adding to the Timeline

Click on the Timeline to select it and then click the Format tab so see specific options:



**Note:** When the Timeline is active, many of the commands on the Task and Resource tabs of the ribbon will be greyed out. Click back on the Gantt chart/Gantt table to work as normal.

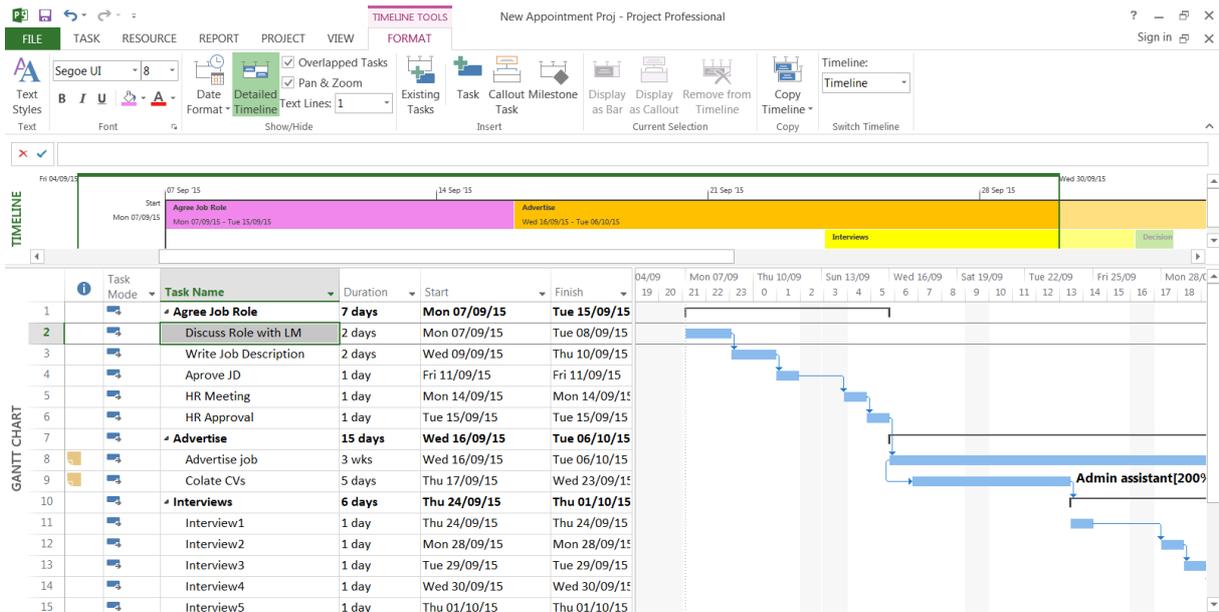
Click the Existing Tasks command to display a list of tasks then tick specific tasks you wish to add to the timeline (for example the summary tasks):



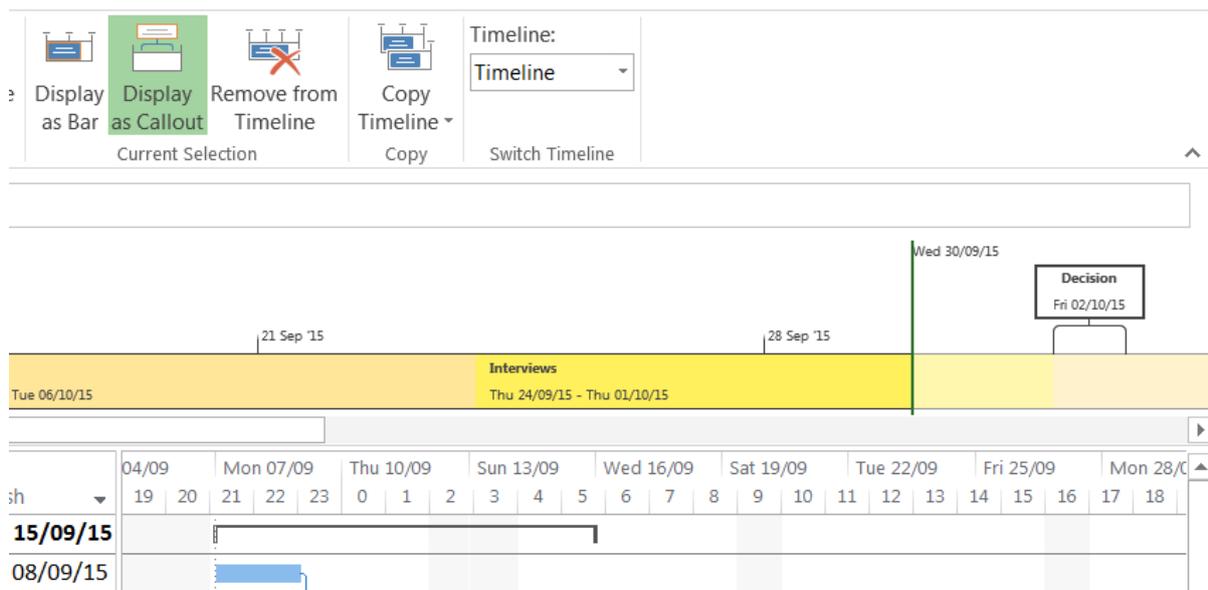
**Tip:** You can also drag and drop tasks onto the Timeline.

### Formatting the Timeline

Once you click inside the Timeline the Format tab allows you to select bar and change their background colour. Choose whether to have overlapping task.



You can also display a task as a Callout.



### Zooming with the Timeline

You can use the Timeline to zoom or change the time displayed for your project:

Click and drag here to move the timeline of the Gantt chart

Click and drag here to change the zoom

Task ID	Task Name	Duration	Start	Finish
1	Agree Job Role	7 days	Mon 07/09/15	Fri 11/09/15
2	Discuss Role with LM	2 days	Mon 07/09/15	Tue 08/09/15
3	Write Job Description	2 days	Wed 09/09/15	Thu 10/09/15
4	Aprove JD	1 day	Fri 11/09/15	Fri 11/09/15
5	HR Meeting	1 day	Mon 14/09/15	Mon 14/09/15
6	HR Approval	1 day	Tue 15/09/15	Tue 15/09/15
7	Advertise	15 days	Wed 16/09/15	Tue 06/10/15
8	Advertise job	3 wks	Wed 16/09/15	Tue 06/10/15
9	Colate CVs	5 days	Thu 17/09/15	Wed 23/09/15
10	Interviews	6 days	Thu 24/09/15	Thu 01/10/15
11	Interview1	1 day	Thu 24/09/15	Thu 24/09/15
12	Interview2	1 day	Mon 28/09/15	Mon 28/09/15
13	Interview3	1 day	Tue 29/09/15	Tue 29/09/15
14	Interview4	1 day	Wed 30/09/15	Wed 30/09/15
15	Interview5	1 day	Thu 01/10/15	Thu 01/10/15

## Copy Timeline

After clicking in the existing Timeline select File, Print to print or PDF on its own as a full page document. Click Copy Timeline to copy the Timeline for pasting into a PowerPoint slide into an email message.

Copy Timeline

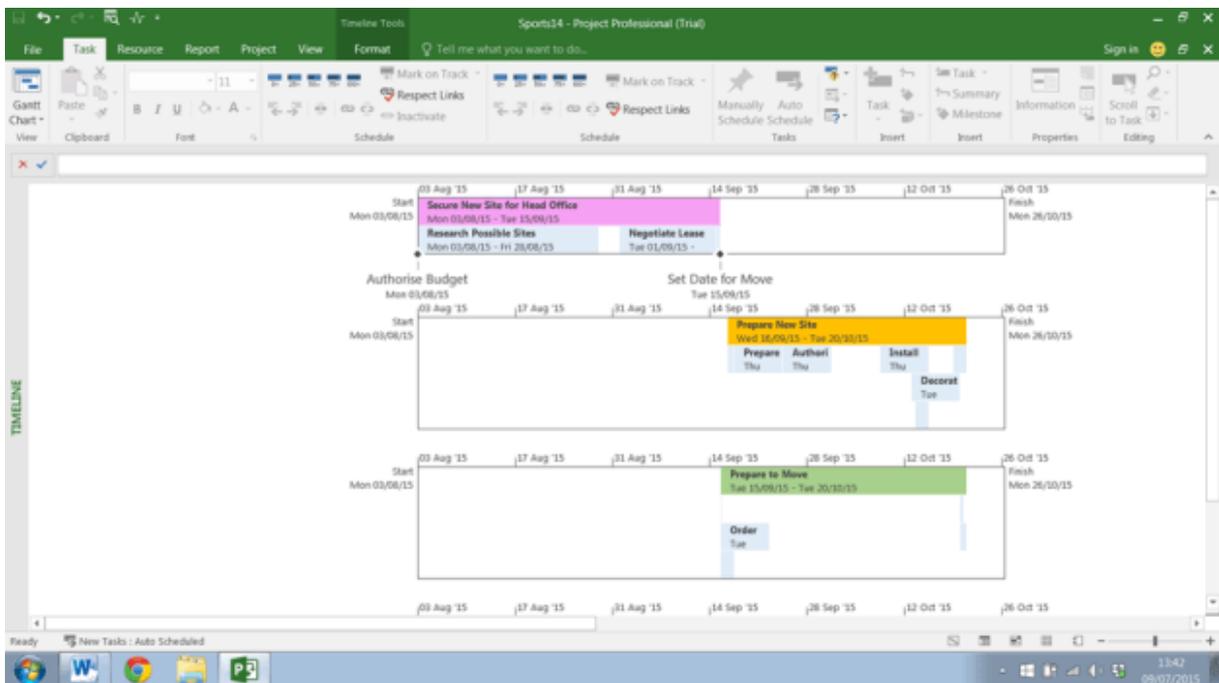
# Creating Multiple Timelines

A new feature of Project 2016 is to be able to add more than one Timeline for a project.

To add further Timeline bars click the **+Timeline** button. Then after clicking inside the second Timeline choose **Existing Tasks** as before and click the tasks to display. In this way it is possible to present each phase of a project as a separate Timelines.

## Colouring Timeline tasks

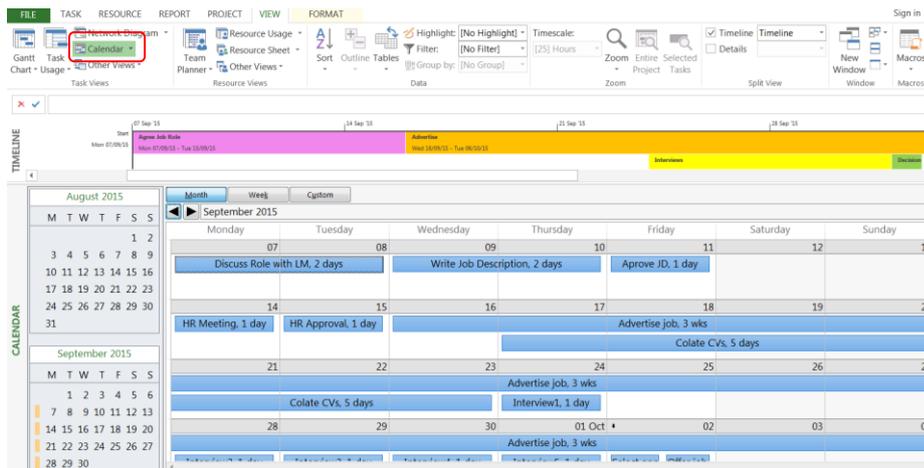
Each Timeline can be formatted by choosing its Format tab and selecting Background Color. Milestones or other tasks by clicking in each Timeline and choosing Existing Tasks.



## Using Calendar view

Sometime you might want to change the normal Gantt view to a Calendar view. This allows you to create, edit, show or review tasks scheduled on specific days, weeks, or months.

To display the Calendar view selects **View, Calendar** from the 'Task Views' section.



This view has three options for viewing your project tasks: -  
by Month, by Week or Custom.

Right-clicking the calendar will give you options to modify settings such as the Timescale where in the 'Week Headings' tab you can change the default view of 7 days to 5 days.

## Using Network Diagram view

Another way of viewing tasks is the Network Diagram. On the View tab of the Ribbon click Network Diagram  Network Diagram ▾

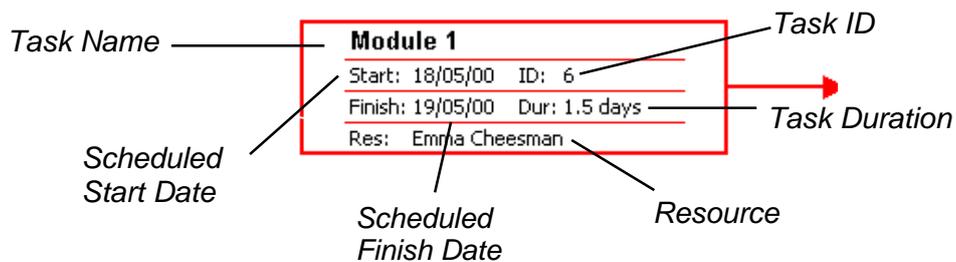
The Network Diagram view displays tasks and task dependencies in a network or flowchart format. A box (sometimes called a node) represents each task, and a line connecting two boxes represents the dependency between the two tasks.

It is possible to create a new project in the Network diagram or modify an existing project by adding and linking tasks.

- To create a new task, in an empty part of the Network diagram drag a rectangle shape with your mouse – a new node will appear ready for you to type in the details
- To create a new task that is linked to an existing task, click the existing task and drag with your mouse to an empty part of the diagram -- a new node will appear ready for you to type in the details.

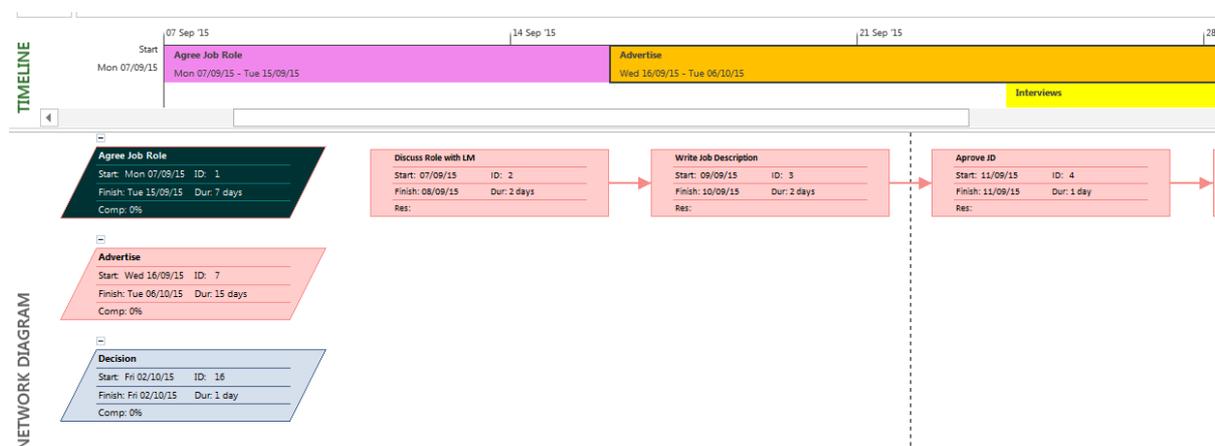
## The Network Box (or Node)

A Network box consists of five fields, as illustrated below. The Task Name, Task ID, Scheduled Start Date, Scheduled Finished Date, and Task Duration are the default fields in the Network box. The Task Name field is white because it is currently ready for user input.



**Note:** By default, the network diagram shows critical tasks in red

## Network Diagram and Timeline together.

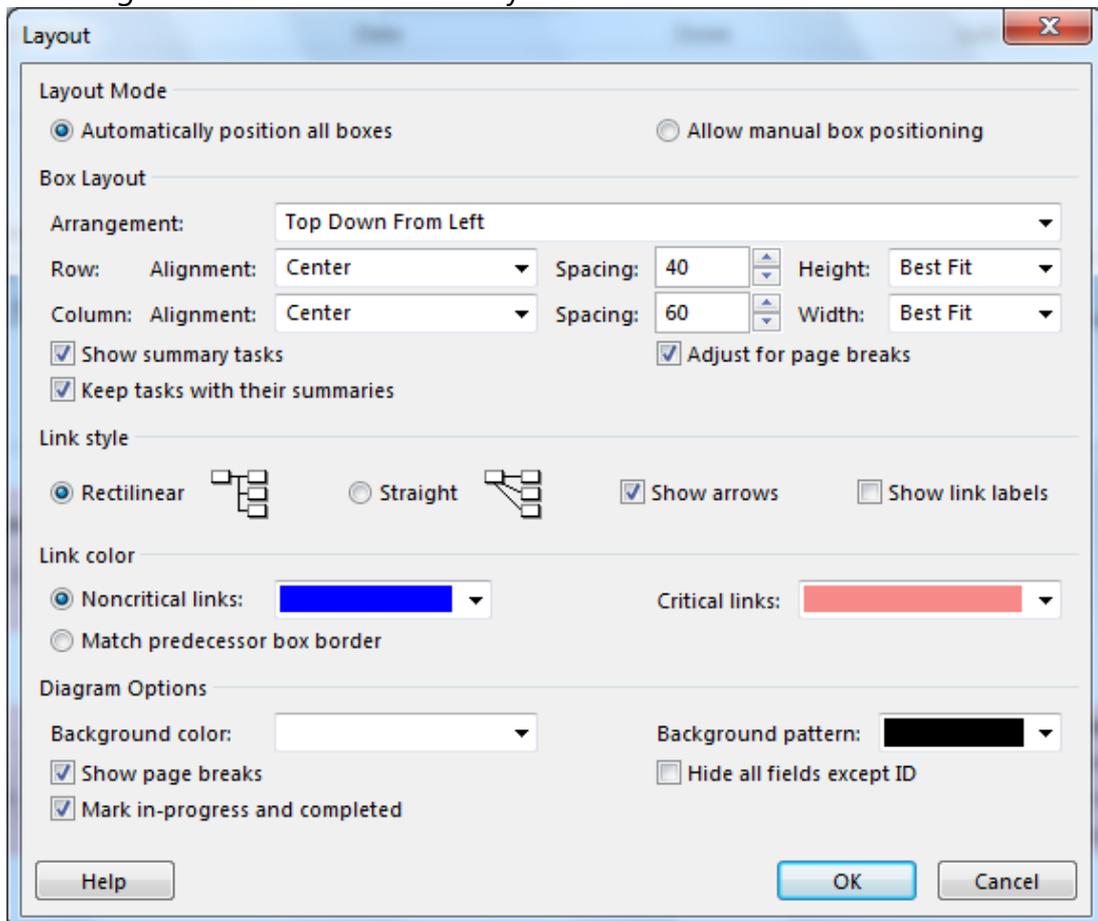


## Adjust the Network Diagram layout

Depending on the structure of your project, the number of summary tasks and subtasks and the number and types of task links, the Network Diagram boxes may not be arranged as you expected. You can modify the layout by applying different box arrangements, adjusting various layout parameters, and applying one of two different link styles:

On the Format tab, click Layout.

1. Under Box Layout, in the Arrangement list, click how you want the boxes to be arranged.
2. For rows and columns, specify alignment, spacing, height, and width in the corresponding boxes.
3. To space boxes evenly, click Fixed in the Height and Width boxes.
4. If you can't arrange Network Diagram boxes the way you want, you may want to position them manually: Click Allow manual box positioning, click OK, and then drag the boxes to the location you want



## Navigating the Network Diagram

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The table below summarises how to move around the Network Diagram with your keyboard and with your mouse.

Movement	Keys	Mouse
To a different NETWORK box	Arrow keys	Click the NETWORK box
Next field in NETWORK box	TAB or ENTER	Click the field
Previous field in NETWORK box	SHIFT+ TAB or SHIFT+ ENTER	Click the field
Page up or page down	PAGE UP or PAGE DOWN	On the vertical scroll bar, click the gray area above or below the scroll box
Page to the left or right	CTRL+ PAGE UP or CTRL+ PAGE DOWN	On the horizontal scroll bar, click the gray area on the left or right of the scroll box to scroll left or right in increments
To upper-left NETWORK box in project	HOME	
To lower-right NETWORK box in project	END	
To upper-left NETWORK box on screen	CTRL+ HOME	
To lower-right NETWORK box on screen	CTRL+ END	

## Viewing the Critical Path

Project will identify the Critical Path for your plan so that you can easily see which tasks are driving your Project end date. This makes it easy to focus on these influential tasks and ensure they are correctly estimated, appropriately linked and adequately resourced.

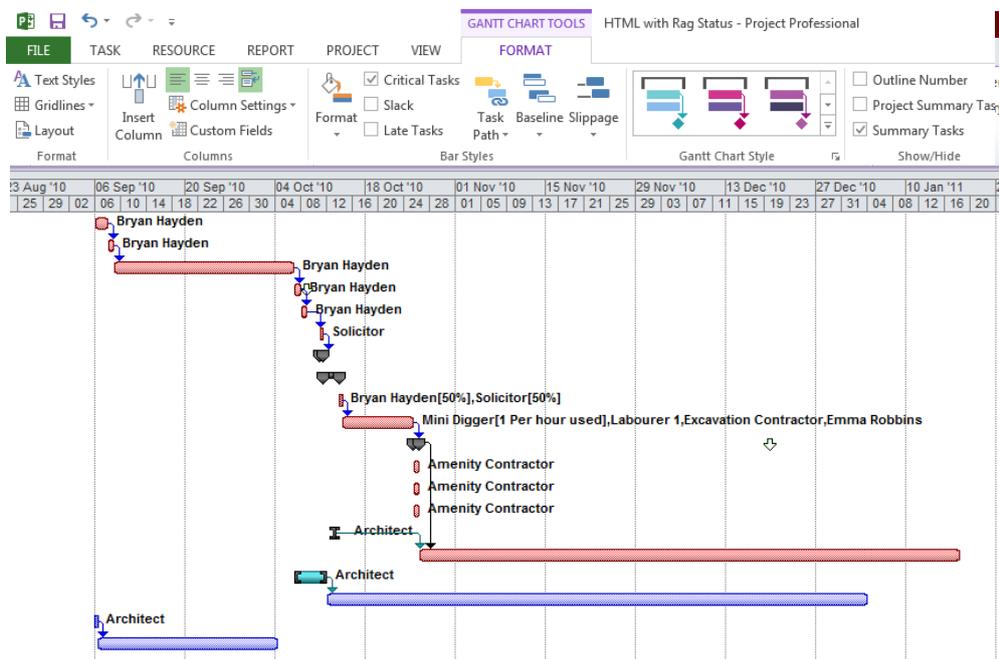
### Critical Path

The Critical Path is made up of those tasks that determine the end date of your project. In other words if a task on the critical path moves, the finish of the project will move as well (positively or negatively)

A quick way to see the critical path is to switch to the Tracking Gantt view. Critical tasks are coloured red.

- From the Task ribbon View group on the left hand side, click the lower half of the Gantt Chart button and choose Tracking Gantt.

To view the critical path in the Gantt view



On the Format tab of the ribbon, click the Critical Path check box:

## Slack (Float)

Slack (also referred to as Float) refers to the time that a task can move before it impacts another task or moves the project's end date. Slack interrupts the critical path and can be created when constraints are applied to tasks.

## Modifying Views

### Resource Usage and Task Usage views

The Usage views are useful for quickly adjusting the amount of work a resource needs to do and the dates when the work needs to be done.

- With the **Task Usage** view, resources are grouped under the tasks to which they are assigned:

[-] Clear land	140 hrs	Work				12h	24h
<i>Labourer 1</i>	56 hrs	Work				4h	8h
<i>Mini Digger</i>	1 Per hour used	Work				0.07	0.14
<i>Emma Robbins</i>	56 hrs	Work				4h	8h
<i>Excavation Contractor</i>	28 hrs	Work				4h	8h
[+] Install services/amenities	32 hrs	Work					
[-] Design Garage	4 hrs	Work				4h	
<i>Architect</i>	4 hrs	Work				4h	

- With the **Resource Usage** view, tasks are grouped under the resources assigned to them:

[-] Bryan Hayden	208 h	Work	32h	24h	24h
<i>Travel to France</i>	16 h	Work			
<i>Start searching for plot</i>	8 h	Work			
<i>View all available plots over time</i>	160 h	Work	32h	24h	24h
<i>Make offer on suitable plot</i>	8 h	Work			
<i>Pay deposit for plot</i>	8 h	Work			
<i>Complete application form</i>	2 h	Work			
<i>Submit plan</i>	4 h	Work			
<i>Pay balance on land acquisition</i>	2 h	Work			
Builder 1	0 h	Work			
Builder 2	0 h	Work			

You can change the total work value for a resource assignment by entering a new value in the Work row

Double click a task to display the Assignment Information dialog box and use this to:

- apply a built in work contour
- apply a different cost table
- Change the **Start** and **Finish** dates of that particular resource assignment

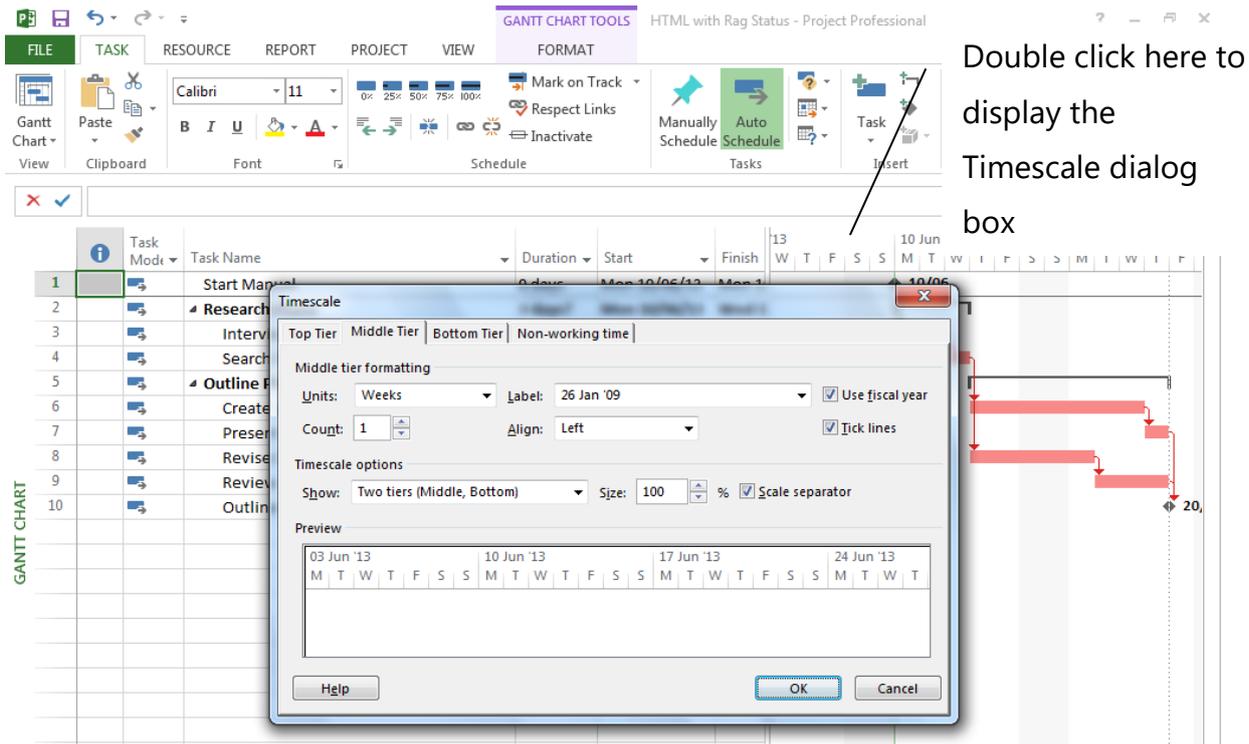
The screenshot shows the 'Assignment Information' dialog box with the 'General' tab selected. The fields are as follows:

Task:	Start Manual		
Resource:	Unassigned		
Work:	0h	Units:	100%
Work contour:	Flat		
Start:	Mon 10/06/13	Booking type:	Committed
Finish:	Mon 10/06/13	Cost:	£0.00
Cost rate table:	A	Assignment Owner:	

**Note:** if you change the contour in the Task Usage view, an indicator representing the contour pattern appears in the **Indicators** field next to the assigned resource: 

## Modifying the Timescale, Zoom and Zoom Slider

The time scale of the Gantt Chart is changed by using the **Zoom Slider** on the Status bar, but you can also use the Timescale dialog box to customise the way the Timescale is displayed:



In the Timescale dialog box you can choose to display up to three tiers (Top, Middle and Bottom) and within each of these it is possible to alter the units, the label and the count of the interval.

# Formatting and sharing information

## Project Properties

You can enter descriptive information about your project in the Properties dialog box. This information will help you and others identify the source and purpose of your project. The Properties dialog box consists of five tabs, described in the table below.

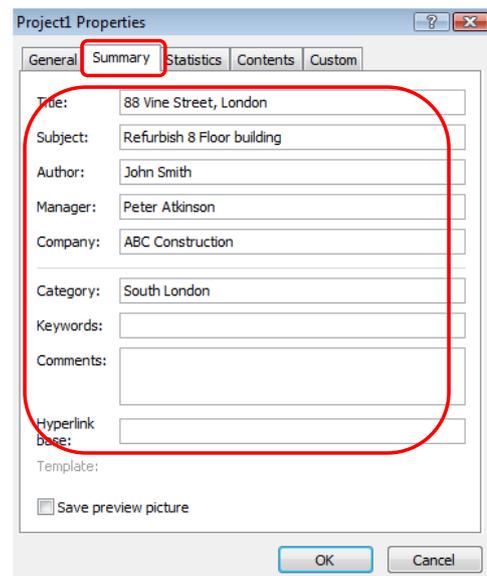
Tab	Function
General	Provides information about the project, including filename, file type and size, file location, size and times of file creation, most recent modification, and most recent access.
Summary	Provides fields for: Project Title, Subject, Author, Manager, Company, Category, Keywords, And Comments.
Statistics	Provides information about project file editing including date created; most recent modification, access, printing, person who last saved it, current revision number and total editing time
Contents	Contains overall schedule information, including project start and finish dates, duration, total work and cost, and percent complete.
Custom	Allows you to enter project properties by which you can search and define links to actual values in your project.

To view and change the Project Information

Select the **File** tab and from **Info**, click **Project Information/Advanced Properties**:

On the Summary tab of the properties dialog box you can type the Project Title, Manager's name, etc.

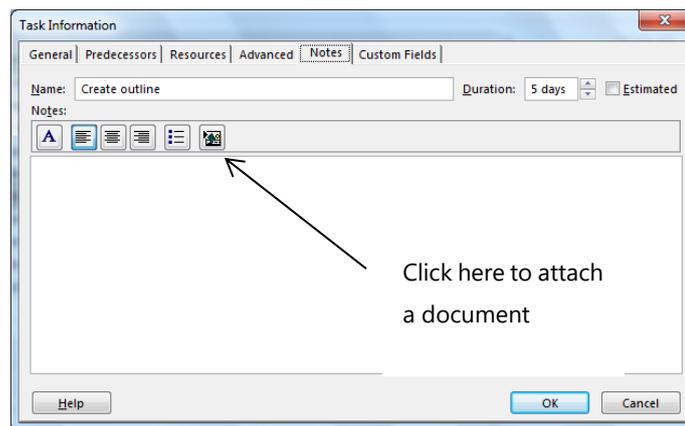
Click OK when you are finished



# Adding Notes and Hyperlinks

## Adding notes to a task

1. Select the task and click the Notes command on the Standard toolbar
2. With the flashing cursor in the Note text area, type your note or click the Insert Object command to attach relevant documents such as Excel spreadsheets or the minutes of a meeting



**Note:** a Note indicator  will appear in the Task's Indicators field

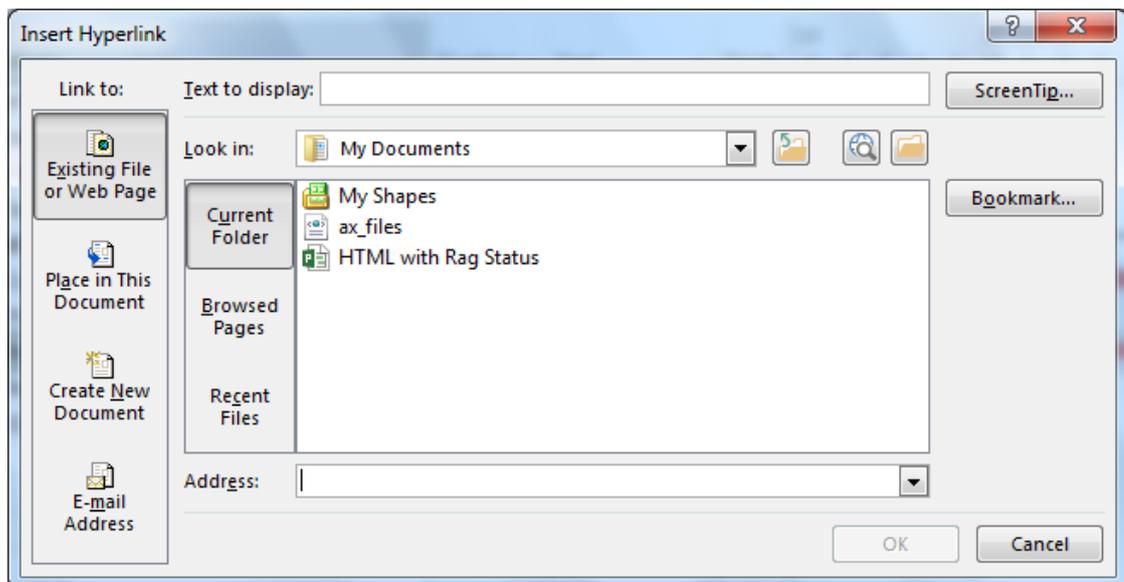
- for a quick view of the Note's first paragraph, point the mouse at the Task's Note indicator
- to **view all** of a Task Note or to **edit** a Note, click in any of the Task's fields and again click the Task Notes button on the Task ribbon Properties group
- **or** double-click the Note icon in the Indicators field
- Task Notes can be printed out with your project plan

## Adding hyperlinks to a task

In Project, a hyperlink is an interactive icon that, when clicked, links to a location in the current project plan, a file in its corresponding application, a web page in a browser, or a new Message form in Outlook for an email address. Hyperlinks are displayed in the **Indicators** column. Only one hyperlink can be attached to any task, resource, or assignment. A default screen tip is assigned to a hyperlink. However, a screen tip of your choice can be specified.

Hyperlinks keep the project plan's file size to a minimum as they only store the location of the object they link to.

1. To insert a Hyperlink into a task first right-click the task and select hyperlink at the bottom of the menu to open the Insert Hyperlink dialogue box. You can also use the short cut key CTRL+K.



2. Choose Existing File or Web Page
3. From the Look in: section, click the drop-down arrow and navigate to the file you wish to hyperlink to
4. Select the required document
5. If you require a screen tip, click the ScreenTip button in the top right corner and complete the screen tip text and click OK
6. Click OK and observe that a hyperlink icon has appeared in the Indicators column
7. To open the document from within Project, click the hyperlink icon.

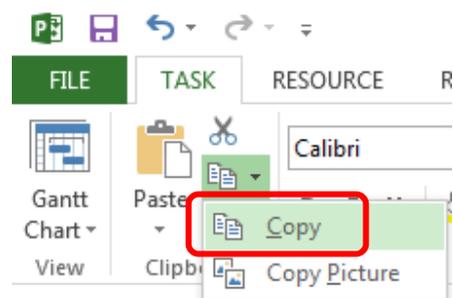
## Copy / Paste tasks and rows

Project table data can also be copied and pasted into Excel by selecting the rows you wish to copy and then pasting the copied rows into an Excel worksheet with a normal paste option. This will paste the data into a table format and includes the headings.

If you use Paste Special you can select Microsoft Project Document Object which will paste the table data and the Gantt chart if visible.

### Procedure to Copy and Paste Project Data into Excel

1. If necessary, modify the position of the columns and charts in the current project plan view.
2. Select the rows you wish to copy
3. Click the 'Copy' button in the 'Clipboard' section of the 'Task' ribbon.
4. Open an Excel file and select the cell where you wish to paste the copied data
5. Click Paste OR select Paste Special and choose Microsoft Project Document Object and click OK

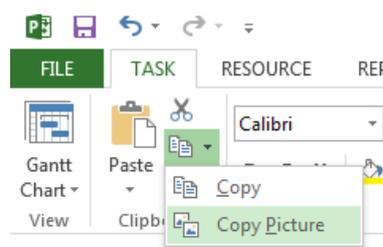


### Copy / Paste Picture

By taking pictures of your project plan, you can include project plan details in a wider variety of applications. So, even though people may not have access to Project or one of the applications that can access exported data, you can still give project information in the form of a picture. You can take a snapshot of any project plan view and either paste it into an open file that can display pictures such as in a PowerPoint slide show, or save it as a graphic file that you can attach to an email, or store in a folder on your computer.

### Copy Picture

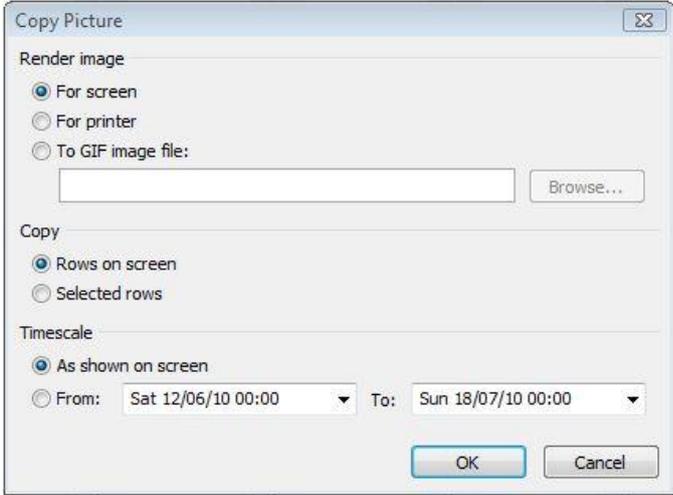
You can capture an image of the project plan as a non-editable picture using the Copy Picture dialog box which is opened when using the 'Copy Picture' button located in the 'Task' ribbon, 'Clipboard' section. Click the drop-down arrow of the 'Copy' button then click the 'Copy Picture' button.



The Copy Picture dialog box provides various options to set the way in which

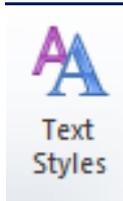
the image is rendered or copied. The copied picture can be pasted into Visio, Word, Excel, or PowerPoint, as well as into an email that is being drafted.

### The Copy Picture Dialog Box



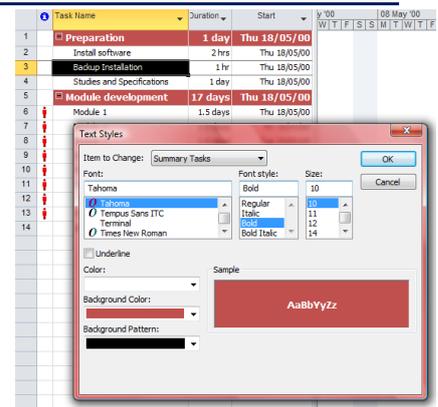
<b>Render Image</b>	Decide on the output format in which the picture is to be copied. The user can either select the For Screen or For Printer option, depending on whether the image has to appear on screen or print. To save the picture as a file that can be used in a web page, the user can select the To GIF Image File option.
<b>Copy</b>	Specify the rows to be included in the picture. The user can include the selected rows or all the rows on screen.
<b>Timescale</b>	Determine the time range during which the project information is to be copied. The user can either include the dates displayed on the screen or specify a specific time range.

## Formatting Bars and the Gantt area



Click the Text Styles command to display the Text Styles dialog box

1. From the Item to Change drop down list choose the item (for example Summary Tasks)
2. Choose the required Font, Size, Colour, etc.
3. Click OK



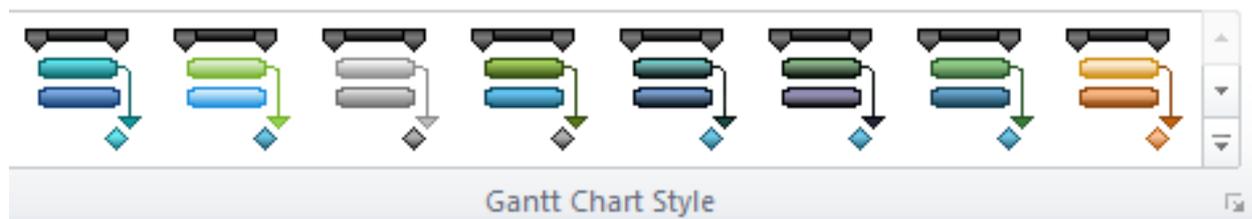
## Customising the Gantt Chart

By default each task entered in the project will be shown with the name of the resource allocated to the task next to the bars.

Gantt Charts form the significant part of a regular communication about your project and can be quickly formatted to display the critical tasks, the current progress, comparison with the original plan, and the new projected completion.

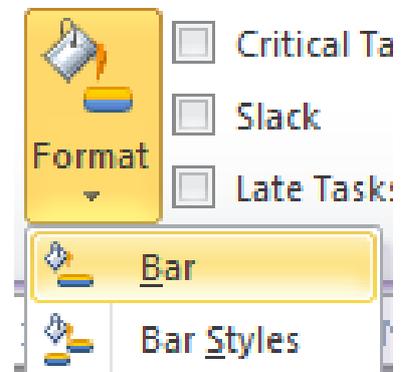
## Using the Formatting Tab of the ribbon

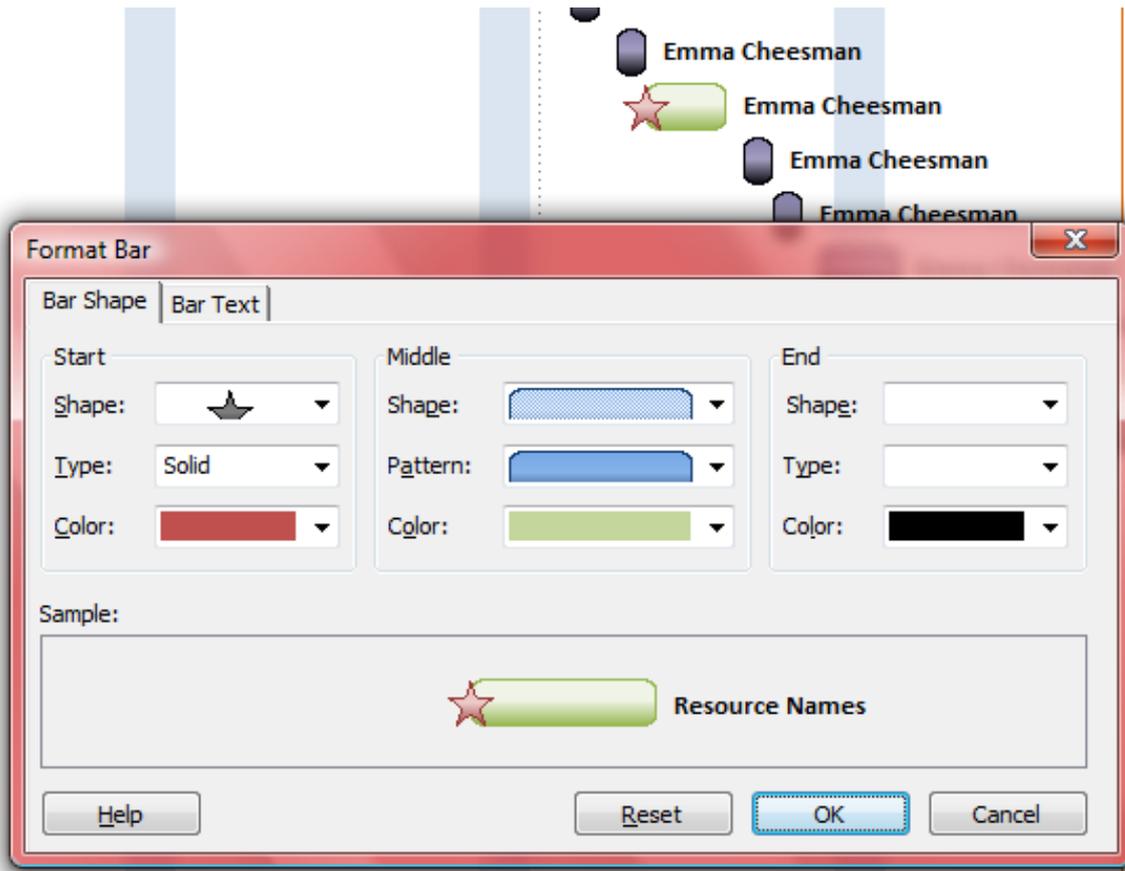
To quickly apply different colours to the Gantt Chart bars, choose a different Gantt Chart Style:



To manually change the look on one Gantt bar:

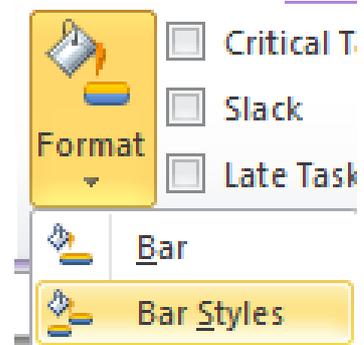
1. Select the task
2. Click the format command
3. Click bar
4. Select the required colours and shapes in the dialog box:





Use the **Bar Styles** command to manually change the display of the different types of tasks (for example, you might display the planned and actual times for each task, in different colours).

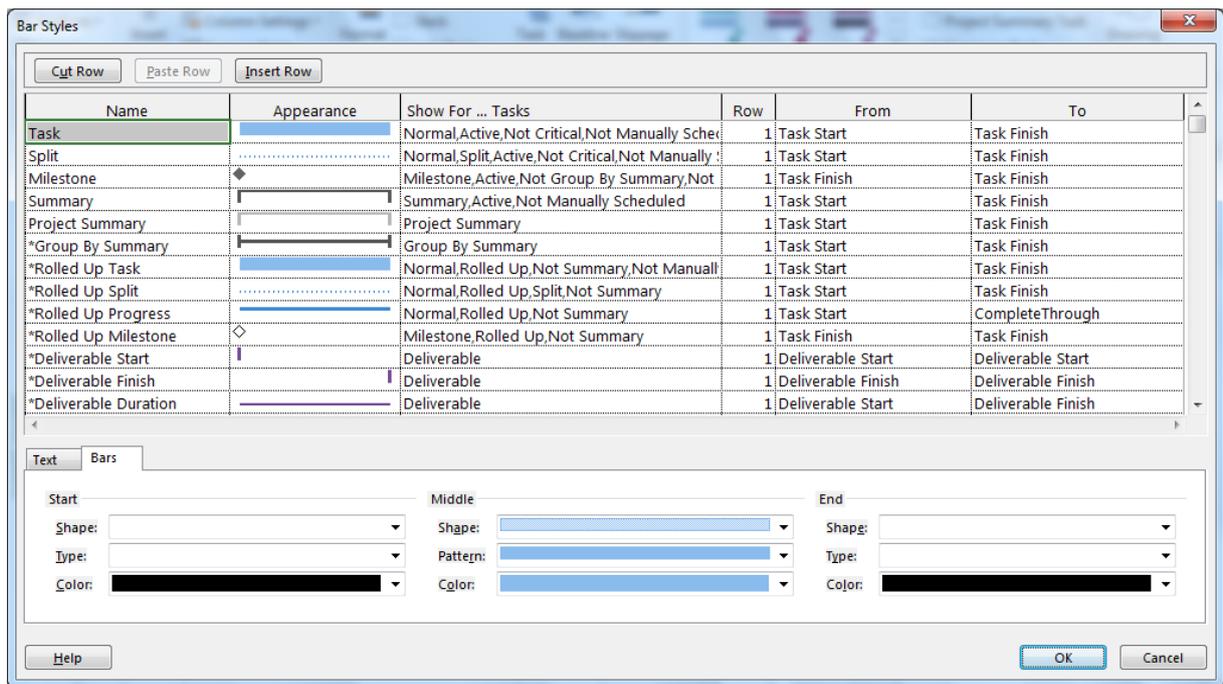
1. Select the type of task you want to change, for example Milestones
2. Chose the required colour and shape
3. Click OK



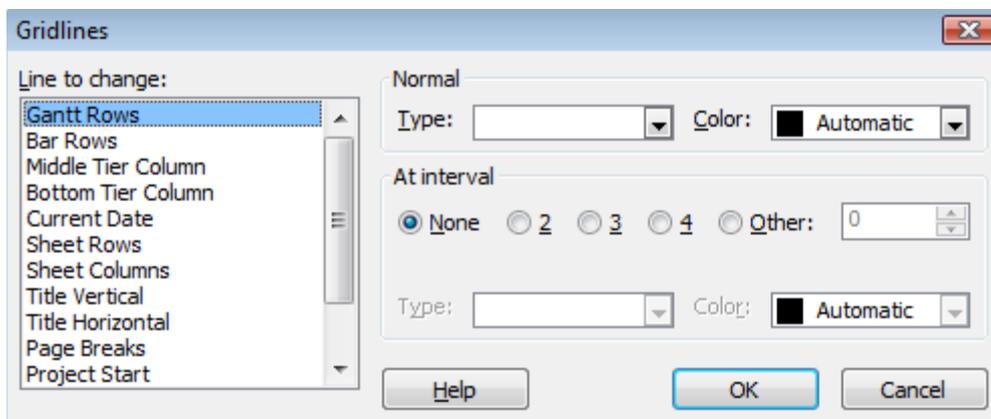
Use the Text tab of the Bar Styles dialog box to change what information is displayed next to the bars on the Gantt Chart:

Select the type of task you want to change

Click the drop down lists to change the type of data

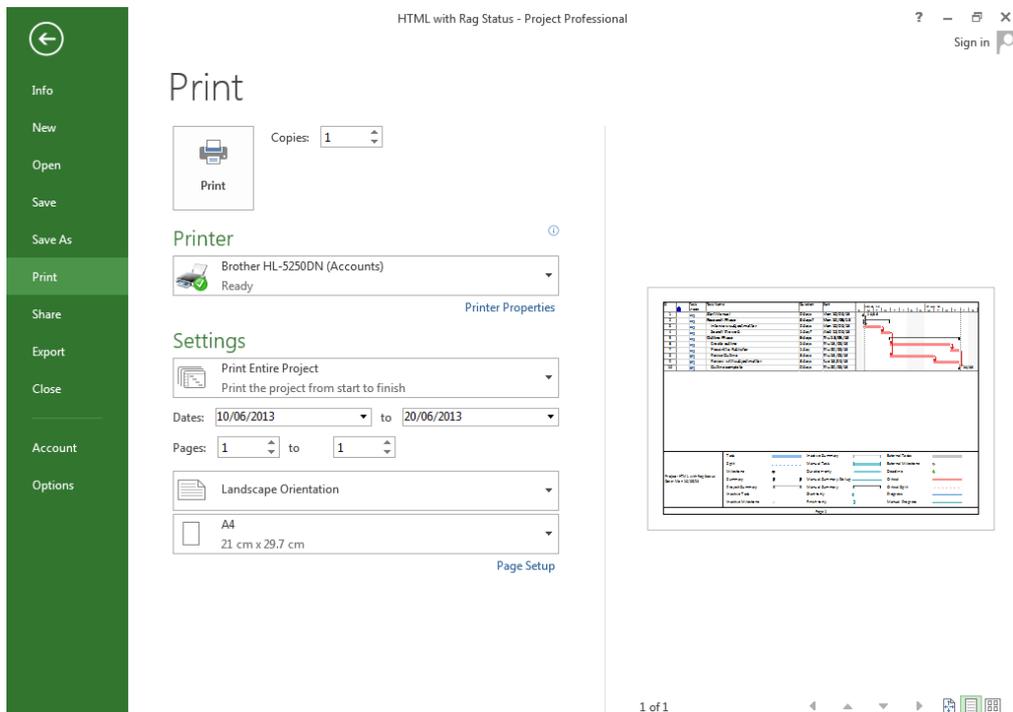


**Other formats** - To add other formatting lines, choose Format ribbon → Format group → Gridlines and choose a line type. Project Start, Project Finish and Current date lines can also be set in Format → Gridlines



# Formatting for Printing

To print a view; go to File → Print, select the relevant settings and click OK.

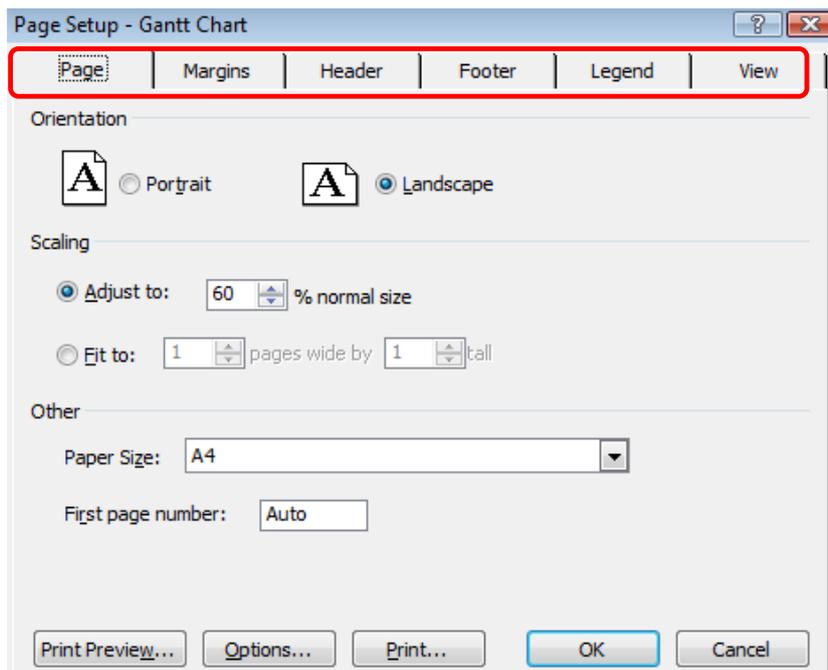


1. Select relevant printer
2. Specify which pages to print
3. Specify the period of time to be covered by the print
4. How many copies are to be printed

## Page Setup

To set up the page for printing

Click on Page Setup → select the relevant options



**Page Tab** Orientation

Scaling

Paper size

**Margins** Specify margins and page borders

**Header / Footer** Specify data to go into the header and footer of each page

**Legend** Modify the content and appearance of the legend

**View** **Choose to print the following:**

All Columns

First X columns

Notes associated with tasks

Blank Pages

And also select here if the timescale is to run to the end of the page

## Changing the date range

Finally before printing a Gantt Chart you may find it useful to specify a date range to print. This can help to with readability and printing upcoming tasks. Use Page Setup to fit to page and to remove the legend if preferred.

The screenshot shows the 'Print' dialog box in Microsoft Project. The 'Print' button is highlighted. The 'Printer' is set to 'Brother HL-5250DN (Accounts)'. The 'Settings' section is expanded, showing 'Print Specific Dates' selected, with dates from '05/09/2015' to '19/10/2015'. The 'Pages' are set to '1' to '1'. The 'Orientation' is 'Landscape Orientation' and the paper size is 'A4'. The background shows a Gantt chart for 'New Appointment Proj' with tasks like 'Aligner installation', 'Write Job Description', 'Interviews', and 'Sign Contract'.

## E&OE

STL Training reserves the right to revise this publication and make changes from time to time in its content without notice.